


STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING						FORM 3 AMENDED REPORT <input type="checkbox"/>				
APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER GMBU Q-16-9-16				
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT MONUMENT BUTTE				
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME GMBU (GRRV)				
6. NAME OF OPERATOR NEWFIELD PRODUCTION COMPANY						7. OPERATOR PHONE 435 646-4825				
8. ADDRESS OF OPERATOR Rt 3 Box 3630 , Myton, UT, 84052						9. OPERATOR E-MAIL mcrozier@newfield.com				
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) ML-16532			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>				
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')				
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')				
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>				
20. LOCATION OF WELL	FOOTAGES		QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN			
LOCATION AT SURFACE	2096 FSL 1866 FWL		NESW	16	9.0 S	16.0 E	S			
Top of Uppermost Producing Zone	1667 FSL 1397 FWL		NESW	16	9.0 S	16.0 E	S			
At Total Depth	1252 FSL 916 FWL		SWSW	16	9.0 S	16.0 E	S			
21. COUNTY DUCESNE			22. DISTANCE TO NEAREST LEASE LINE (Feet) 916		23. NUMBER OF ACRES IN DRILLING UNIT 20					
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 992		26. PROPOSED DEPTH MD: 6113 TVD: 5955					
27. ELEVATION - GROUND LEVEL 5902			28. BOND NUMBER B001834		29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 437478					
Hole, Casing, and Cement Information										
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
Surf	12.25	8.625	0 - 300	24.0	J-55 ST&C	8.3	Class G	138	1.17	15.8
Prod	7.875	5.5	0 - 6113	15.5	J-55 LT&C	8.3	Premium Lite High Strength	284	3.26	11.0
							50/50 Poz	363	1.24	14.3
ATTACHMENTS										
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES										
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER					<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN					
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)					<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER					
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
NAME Mandie Crozier				TITLE Regulatory Tech			PHONE 435 646-4825			
SIGNATURE				DATE 05/24/2012			EMAIL mcrozier@newfield.com			
API NUMBER ASSIGNED 43013514490000				APPROVAL  Permit Manager						

NEWFIELD PRODUCTION COMPANY
GMBU Q-16-9-16
AT SURFACE: NE/SW SECTION 16, T9S, R16E
DUCHESNE COUNTY, UTAH

TEN POINT DRILLING PROGRAM

1. **GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

2. **ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

Uinta	0' – 1495'
Green River	1495'
Wasatch	5905'
Proposed TD	6113'

3. **ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:**

Green River Formation (Oil) 1495' – 5905'

Fresh water may be encountered in the Uinta Formation, but would not be expected below about 350'. All water shows and water bearing geologic units shall be reported to the geologic and engineering staff of the Vernal Office prior to running the next string of casing or before plugging orders are requested. All water shows must be reported within one (1) business day after being encountered.

All usable (<10,000 PPM TDS) water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth and adequately protected. This information shall be reported to the Vernal Office.

Detected water flows shall be sampled, analyzed, and reported to the geologic & engineering staff of the Vernal Office. The office may request additional water samples for further analysis. Usage of the State of Utah form *Report of Water Encountered* is acceptable, but not required.

The following information is requested for water shows and samples where applicable:

Location & Sampled Interval	Date Sampled
Flow Rate	Temperature
Hardness	pH
Water Classification (State of Utah)	Dissolved Calcium (Ca) (mg/l)
Dissolved Iron (Fe) (ug/l)	Dissolved Sodium (Na) (mg/l)
Dissolved Magnesium (Mg) (mg/l)	Dissolved Carbonate (CO ₃) (mg/l)
Dissolved Bicarbonate (NaHCO ₃) (mg/l)	Dissolved Chloride (Cl) (mg/l)
Dissolved Sulfate (SO ₄) (mg/l)	Dissolved Total Solids (TDS) (mg/l)

4. **PROPOSED CASING PROGRAM**

a. Casing Design: GMBU Q-16-9-16

Size	Interval		Weight	Grade	Coupling	Design Factors		
	Top	Bottom				Burst	Collapse	Tension
Surface casing 8-5/8"	0'	300'	24.0	J-55	STC	2,950 17.53	1,370 14.35	244,000 33.89
Prod casing 5-1/2"	0'	6,113'	15.5	J-55	LTC	4,810 2.47	4,040 2.08	217,000 2.29

Assumptions:

- 1) Surface casing max anticipated surface press (MASP) = Frac gradient – gas gradient
- 2) Prod casing MASP (production mode) = Pore pressure – gas gradient
- 3) All collapse calculations assume fully evacuated casing w/ gas gradient
- 4) All tension calculations assume air weight

Frac gradient at surface casing shoe = 13.0 ppg
 Pore pressure at surface casing shoe = 8.33 ppg
 Pore pressure at prod casing shoe = 8.33 ppg
 Gas gradient = 0.115 psi/ft

All casing shall be new or, if used, inspected and tested. Used casing shall meet or exceed API standards for new casing.

All casing strings shall have a minimum of 1 (one) centralizer on each of the bottom three (3) joints.

b. Cementing Design: GMBU Q-16-9-16

Job	Fill	Description	Sacks	OH Excess*	Weight (ppg)	Yield (ft ³ /sk)
			ft ³			
Surface casing	300'	Class G w/ 2% CaCl	138 161	30%	15.8	1.17
Prod casing Lead	4,113'	Prem Lite II w/ 10% gel + 3% KCl	284 926	30%	11.0	3.26
Prod casing Tail	2,000'	50/50 Poz w/ 2% gel + 3% KCl	363 451	30%	14.3	1.24

*Actual volume pumped will be 15% over the caliper log

- Compressive strength of lead cement: 1800 psi @ 24 hours, 2250 psi @ 72 hours
- Compressive strength of tail cement: 2500 psi @ 24 hours

Hole Sizes: A 12-1/4" hole will be drilled for the 8-5/8" surface casing. A 7-7/8" hole will be drilled for the 5-1/2" production casing.

The 8-5/8" surface casing shall in all cases be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.

5. **MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:**

The operator's minimum specifications for pressure control equipment are as follows:

An 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOP's will be check daily.

Refer to **Exhibit C** for a diagram of BOP equipment that will be used on this well.

6. **TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:**

From surface to ± 300 feet will be drilled with an air/mist system. The air rig is equipped with a 6 1/2" blooie line that is straight run and securely anchored. The blooie line is used with a discharge less than 100 ft from the wellbore in order to minimize the well pad size. The blooie line is not equipped with an automatic igniter or continuous pilot light and the compressor is located less than 100 ft from the well bore due to the low possibility of combustion with the air dust mixture. The trailer mounted compressor (capacity of 2000 CFM) has a safety shut-off valve which is located 15 feet from the air rig. A truck with 70 bbls of water is on stand by to be used as kill fluid, if necessary. From about ± 300 feet to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with a KCl substitute additive. This additive will be identified in the APD and reviewed to determine if the reserve pit shall be lined. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite

No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh aquifers.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

Newfield Production will **visually** monitor pit levels and flow from the well during drilling operations.

7. **AUXILIARY SAFETY EQUIPMENT TO BE USED:**

Auxiliary safety equipment will be a Kelly Cock, bit float, and a TIW valve with drill pipe threads.

8. **TESTING, LOGGING AND CORING PROGRAMS:**

The logging program will consist of a Dual Induction, Gamma Ray and Caliper log from TD to base of surface casing @ 300' +/-, and a Compensated Neutron-Formation Density Log from TD to 3500' +-. A cement bond log will be run from PBTD to cement top. No drill stem testing or coring is planned for this well.

9. **ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

No abnormal temperatures or pressures are anticipated. No hydrogen sulfide has been encountered or is known to exist from previous drilling in the area at this depth. Maximum anticipated bottomhole pressure will approximately equal total depth in feet multiplied by a 0.433 psi/foot gradient.

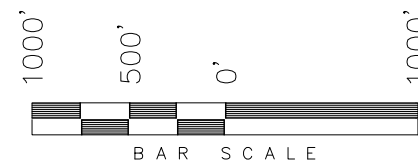
10. **ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:**

It is anticipated that the drilling operations will commence the fourth quarter of 2012, and take approximately seven (7) days from spud to rig release.

T9S, R16E, S.L.B.&M.**NEWFIELD EXPLORATION COMPANY**

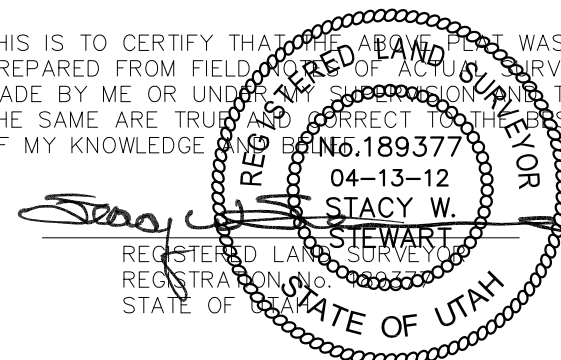
WELL LOCATION, Q-16-9-16, LOCATED AS SHOWN IN THE NE 1/4 SW 1/4 OF SECTION 16, T9S, R16E, S.L.B.&M. DUCHESNE COUNTY, UTAH.

TARGET BOTTOM HOLE, Q-16-9-16, LOCATED AS SHOWN IN THE SW 1/4 SW 1/4 OF SECTION 16, T9S, R16E, S.L.B.&M. DUCHESNE COUNTY, UTAH.

**NOTES:**

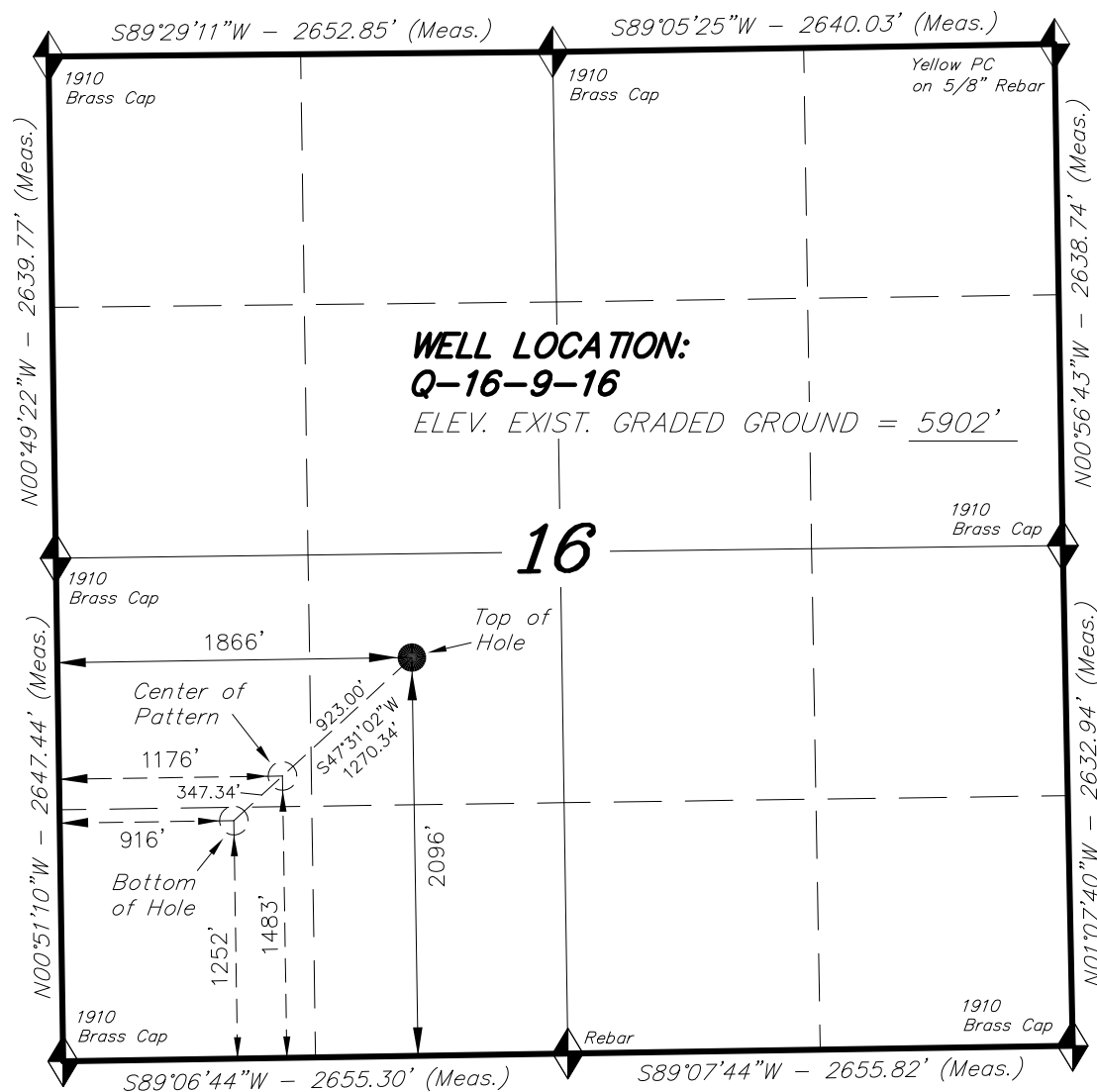
1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

**TRI STATE LAND SURVEYING & CONSULTING**

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078
(435) 781-2501

DATE SURVEYED: 01-27-12	SURVEYED BY: C.S.	VERSION:
DATE DRAWN: 04-11-12	DRAWN BY: F.T.M.	V2
REVISED:	SCALE: 1" = 1000'	

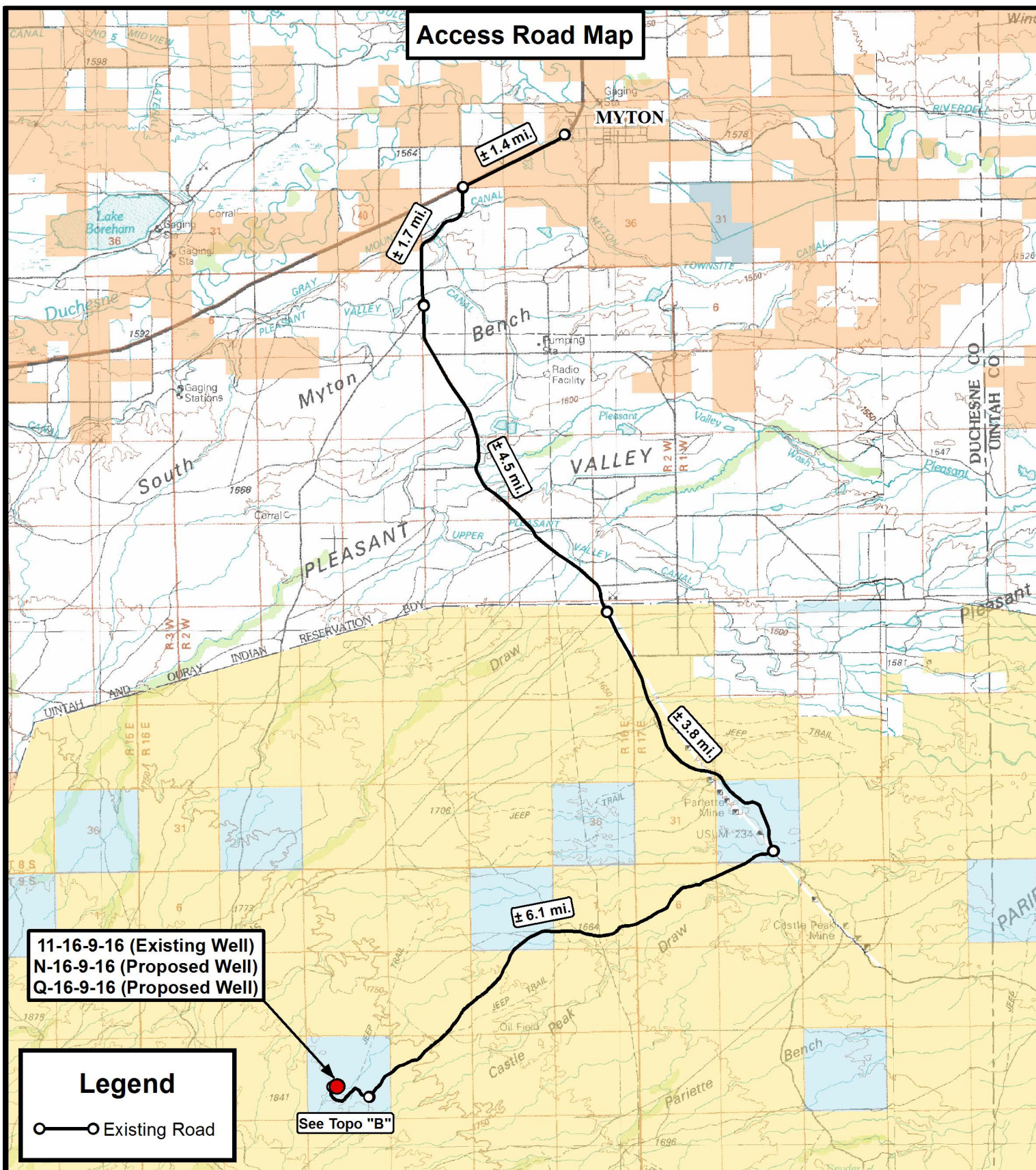


= SECTION CORNERS LOCATED

BASIS OF ELEV; Elevations are based on an N.G.S. OPUS Correction. LOCATION: LAT. 40°04'09.56" LONG. 110°00'43.28" (Tristate Aluminum Cap) Elev. 5281.57'

Q-16-9-16
(Surface Location) NAD 83
LATITUDE = 40° 01' 45.73"
LONGITUDE = 110° 07' 37.56"

Access Road Map



180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501
F: (435) 781-2518

NEWFIELD EXPLORATION COMPANY

11-16-9-16 (Existing Well)
N-16-9-16 (Proposed Well)
Q-16-9-16 (Proposed Well)
SEC. 16, T9S, R16E, S.L.B.&M. Duchesne County, UT.

DRAWN BY:	D.C.R.	REVISED:	VERSION:
DATE:	02-14-2012		V2
SCALE:	1:100,000		

TOPOGRAPHIC MAP

SHEET

A

Access Road Map


11-16-9-16 (Existing Well)
N-16-9-16 (Proposed Well)
Q-16-9-16 (Proposed Well)

± 200'

± 0.7 mi.

Myton ± 17.5 mi.

Legend

 Existing Road

THE PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY TRI-STATE LAND SURVEYING, INC. - TRI-STATE DOES NOT WARRANTY PROPERTY PARCEL DATA OR ANY ASSOCIATED INFORMATION. A PROPERTY SURVEY IS REQUIRED TO DETERMINE THE ACTUAL LOCATION OF PROPERTY LINES AND SHOW ACCURATE DISTANCES ACROSS PARCELS.

Tri State
Land Surveying, Inc.
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501
F: (435) 781-2518

**NEWFIELD EXPLORATION COMPANY**

11-16-9-16 (Existing Well)
N-16-9-16 (Proposed Well)
Q-16-9-16 (Proposed Well)
SEC. 16, T9S, R16E, S.L.B.&M. Duchesne County, UT.

DRAWN BY: D.C.R. REVISED: 04-11-12 D.C.R. VERSION:

DATE: 02-14-2012

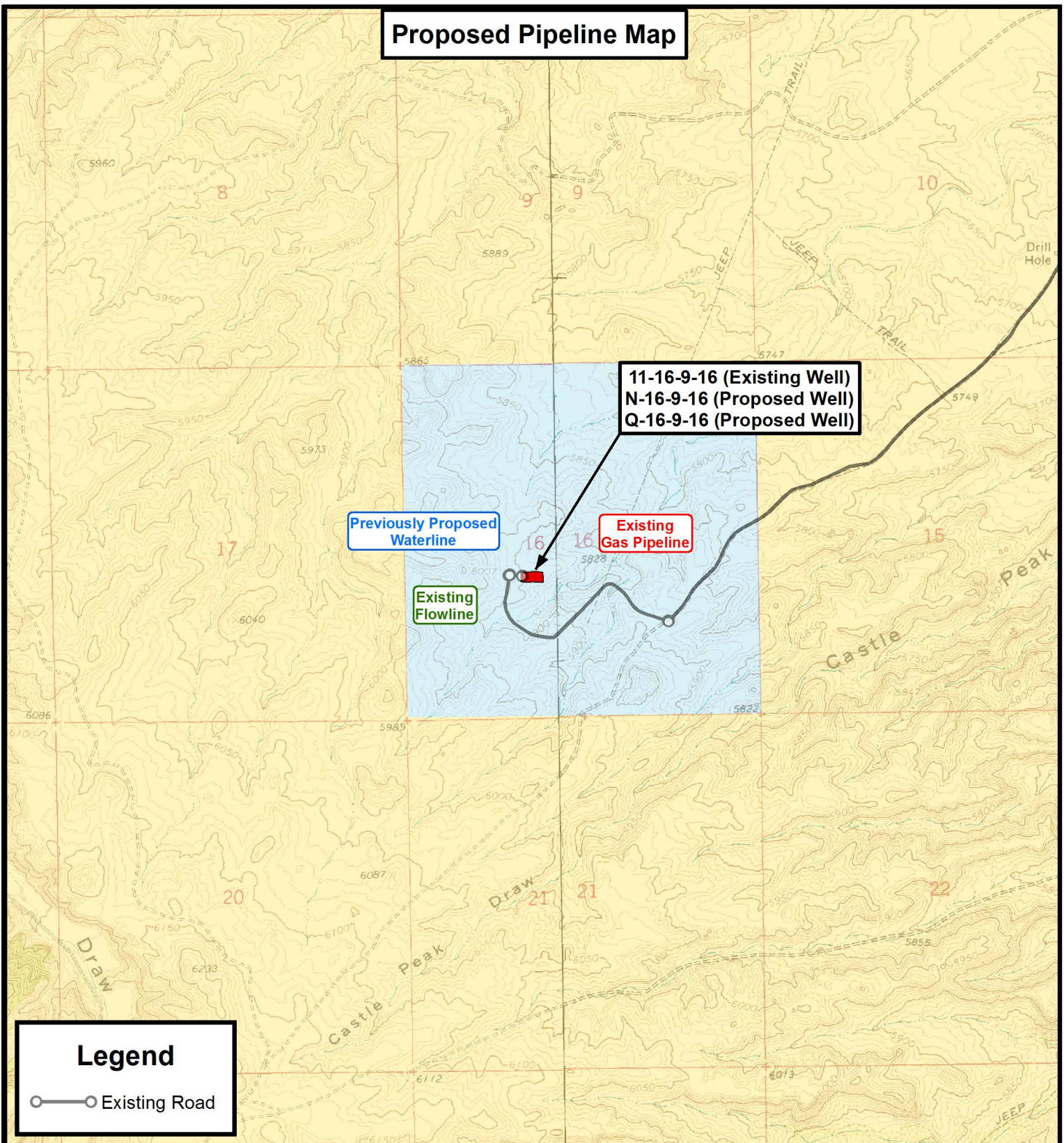
SCALE: 1" = 2,000'

V2**TOPOGRAPHIC MAP**

SHEET

B

Proposed Pipeline Map



Legend

—○— Existing Road

THE PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY TRI-STATE LAND SURVEYING, INC. - TRI-STATE DOES NOT WARRANTY PROPERTY PARCEL DATA OR ANY ASSOCIATED INFORMATION. A PROPERTY SURVEY IS REQUIRED TO DETERMINE THE ACTUAL LOCATION OF PROPERTY LINES AND SHOW ACCURATE DISTANCES ACROSS PARCELS.

Tri State
Land Surveying, Inc.
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501
F: (435) 781-2518



NEWFIELD EXPLORATION COMPANY

11-16-9-16 (Existing Well)
N-16-9-16 (Proposed Well)
Q-16-9-16 (Proposed Well)
SEC. 16, T9S, R16E, S.L.B.&M. Duchesne County, UT.

DRAWN BY:	D.C.R.	REVISED:	04-11-12 D.C.R.	VERSION:
DATE:	02-14-2012			V2
SCALE:	1" = 2,000'			

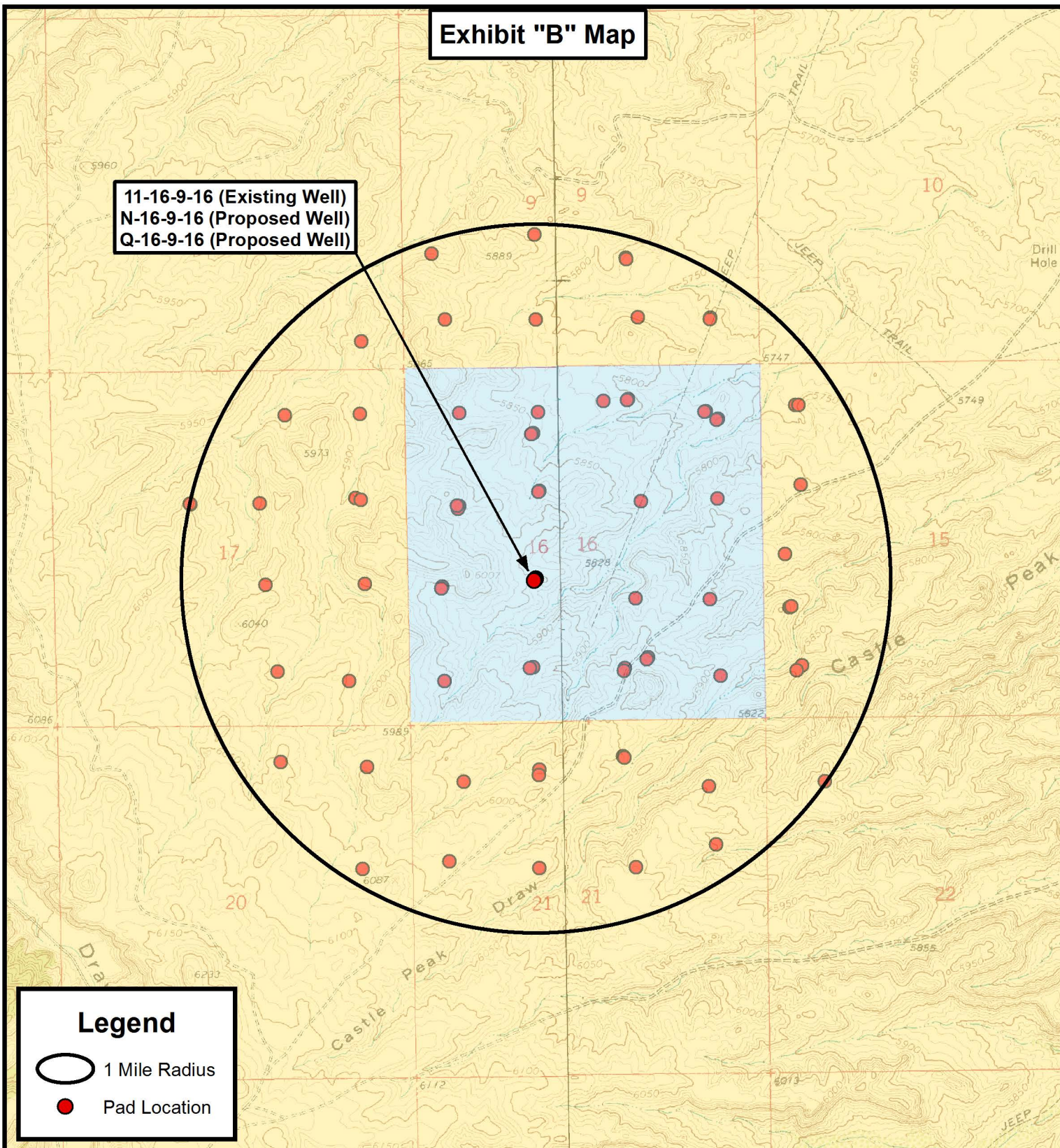
TOPOGRAPHIC MAP

SHEET

C

Exhibit "B" Map

11-16-9-16 (Existing Well)
 N-16-9-16 (Proposed Well)
 Q-16-9-16 (Proposed Well)

**Legend**

- 1 Mile Radius
 ● Pad Location

THE PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY TRI-STATE LAND SURVEYING, INC. - TRI-STATE DOES NOT WARRANTY PROPERTY PARCEL DATA OR ANY ASSOCIATED INFORMATION. A PROPERTY SURVEY IS REQUIRED TO DETERMINE THE ACTUAL LOCATION OF PROPERTY LINES AND SHOW ACCURATE DISTANCES ACROSS PARCELS.



**Tri State
 Land Surveying, Inc.**

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501
 F: (435) 781-2518

**NEWFIELD EXPLORATION COMPANY**

11-16-9-16 (Existing Well)
 N-16-9-16 (Proposed Well)
 Q-16-9-16 (Proposed Well)

SEC. 16, T9S, R16E, S.L.B.&M. Duchesne County, UT.

DRAWN BY:	D.C.R.	REVISED:	VERSION:
DATE:	02-14-2012		V2
SCALE:	1" = 2,000'		

TOPOGRAPHIC MAP

SHEET

D



NEWFIELD EXPLORATION

**USGS Myton SW (UT)
SECTION 16 T9S, R16E
Q-16-9-16**

Wellbore #1

Plan: Design #1

Standard Planning Report

09 April, 2012





Payzone Directional Planning Report



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well Q-16-9-16
Company:	NEWFIELD EXPLORATION	TVD Reference:	Q-16-9-16 @ 5914.0ft (Original Well Elev)
Project:	USGS Myton SW (UT)	MD Reference:	Q-16-9-16 @ 5914.0ft (Original Well Elev)
Site:	SECTION 16 T9S, R16E	North Reference:	True
Well:	Q-16-9-16	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Site						SECTION 16 T9S, R16E											
Site Position:			Northing:			7,183,440.35 ft			Latitude:			40° 1' 56.460 N					
From:			Lat/Long			Easting:			2,023,704.73 ft			Longitude:			110° 7' 51.890 W		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.88 °		

Well	Q-16-9-16, SHL LAT: 40° 01' 45.73" LONG: -110° 07' 37.56"					
Well Position	+N/-S	-1,085.7 ft	Northing:	7,182,371.87 ft	Latitude:	40° 1' 45.730 N
	+E/-W	1,114.6 ft	Easting:	2,024,835.84 ft	Longitude:	110° 7' 37.560 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	5,914.0 ft	Ground Level:	5,902.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/9/2012	11.23	65.75	52,169

Design	Design #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	4,625.0	0.0	0.0	227.52

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,575.7	14.64	227.52	1,565.1	-83.7	-91.4	1.50	1.50	0.00	227.52	
4,738.2	14.64	227.52	4,625.0	-623.3	-680.7	0.00	0.00	0.00	0.00	Q-16-9-16 TGT
6,112.8	14.64	227.52	5,955.0	-857.9	-936.9	0.00	0.00	0.00	0.00	



Payzone Directional

Planning Report



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well Q-16-9-16
Company:	NEWFIELD EXPLORATION	TVD Reference:	Q-16-9-16 @ 5914.0ft (Original Well Elev)
Project:	USGS Myton SW (UT)	MD Reference:	Q-16-9-16 @ 5914.0ft (Original Well Elev)
Site:	SECTION 16 T9S, R16E	North Reference:	True
Well:	Q-16-9-16	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	1.50	227.52	700.0	-0.9	-1.0	1.3	1.50	1.50	0.00
800.0	3.00	227.52	799.9	-3.5	-3.9	5.2	1.50	1.50	0.00
900.0	4.50	227.52	899.7	-8.0	-8.7	11.8	1.50	1.50	0.00
1,000.0	6.00	227.52	999.3	-14.1	-15.4	20.9	1.50	1.50	0.00
1,100.0	7.50	227.52	1,098.6	-22.1	-24.1	32.7	1.50	1.50	0.00
1,200.0	9.00	227.52	1,197.5	-31.8	-34.7	47.0	1.50	1.50	0.00
1,300.0	10.50	227.52	1,296.1	-43.2	-47.2	64.0	1.50	1.50	0.00
1,400.0	12.00	227.52	1,394.2	-56.4	-61.6	83.5	1.50	1.50	0.00
1,500.0	13.50	227.52	1,491.7	-71.3	-77.8	105.5	1.50	1.50	0.00
1,575.7	14.64	227.52	1,565.1	-83.7	-91.4	123.9	1.50	1.50	0.00
1,600.0	14.64	227.52	1,588.6	-87.8	-95.9	130.1	0.00	0.00	0.00
1,700.0	14.64	227.52	1,685.4	-104.9	-114.6	155.3	0.00	0.00	0.00
1,800.0	14.64	227.52	1,782.1	-122.0	-133.2	180.6	0.00	0.00	0.00
1,900.0	14.64	227.52	1,878.9	-139.0	-151.8	205.9	0.00	0.00	0.00
2,000.0	14.64	227.52	1,975.7	-156.1	-170.5	231.1	0.00	0.00	0.00
2,100.0	14.64	227.52	2,072.4	-173.2	-189.1	256.4	0.00	0.00	0.00
2,200.0	14.64	227.52	2,169.2	-190.2	-207.7	281.7	0.00	0.00	0.00
2,300.0	14.64	227.52	2,265.9	-207.3	-226.4	306.9	0.00	0.00	0.00
2,400.0	14.64	227.52	2,362.7	-224.4	-245.0	332.2	0.00	0.00	0.00
2,500.0	14.64	227.52	2,459.4	-241.4	-263.6	357.5	0.00	0.00	0.00
2,600.0	14.64	227.52	2,556.2	-258.5	-282.3	382.7	0.00	0.00	0.00
2,700.0	14.64	227.52	2,652.9	-275.5	-300.9	408.0	0.00	0.00	0.00
2,800.0	14.64	227.52	2,749.7	-292.6	-319.6	433.3	0.00	0.00	0.00
2,900.0	14.64	227.52	2,846.5	-309.7	-338.2	458.5	0.00	0.00	0.00
3,000.0	14.64	227.52	2,943.2	-326.7	-356.8	483.8	0.00	0.00	0.00
3,100.0	14.64	227.52	3,040.0	-343.8	-375.5	509.1	0.00	0.00	0.00
3,200.0	14.64	227.52	3,136.7	-360.9	-394.1	534.3	0.00	0.00	0.00
3,300.0	14.64	227.52	3,233.5	-377.9	-412.7	559.6	0.00	0.00	0.00
3,400.0	14.64	227.52	3,330.2	-395.0	-431.4	584.9	0.00	0.00	0.00
3,500.0	14.64	227.52	3,427.0	-412.1	-450.0	610.1	0.00	0.00	0.00
3,600.0	14.64	227.52	3,523.7	-429.1	-468.6	635.4	0.00	0.00	0.00
3,700.0	14.64	227.52	3,620.5	-446.2	-487.3	660.7	0.00	0.00	0.00
3,800.0	14.64	227.52	3,717.3	-463.2	-505.9	685.9	0.00	0.00	0.00
3,900.0	14.64	227.52	3,814.0	-480.3	-524.5	711.2	0.00	0.00	0.00
4,000.0	14.64	227.52	3,910.8	-497.4	-543.2	736.5	0.00	0.00	0.00
4,100.0	14.64	227.52	4,007.5	-514.4	-561.8	761.7	0.00	0.00	0.00
4,200.0	14.64	227.52	4,104.3	-531.5	-580.4	787.0	0.00	0.00	0.00
4,300.0	14.64	227.52	4,201.0	-548.6	-599.1	812.3	0.00	0.00	0.00
4,400.0	14.64	227.52	4,297.8	-565.6	-617.7	837.6	0.00	0.00	0.00
4,500.0	14.64	227.52	4,394.5	-582.7	-636.3	862.8	0.00	0.00	0.00
4,600.0	14.64	227.52	4,491.3	-599.8	-655.0	888.1	0.00	0.00	0.00
4,700.0	14.64	227.52	4,588.0	-616.8	-673.6	913.4	0.00	0.00	0.00
4,738.2	14.64	227.52	4,625.0	-623.3	-680.7	923.0	0.00	0.00	0.00
4,800.0	14.64	227.52	4,684.8	-633.9	-692.2	938.6	0.00	0.00	0.00
4,900.0	14.64	227.52	4,781.6	-650.9	-710.9	963.9	0.00	0.00	0.00
5,000.0	14.64	227.52	4,878.3	-668.0	-729.5	989.2	0.00	0.00	0.00
5,100.0	14.64	227.52	4,975.1	-685.1	-748.1	1,014.4	0.00	0.00	0.00



Payzone Directional

Planning Report



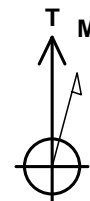
Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well Q-16-9-16
Company:	NEWFIELD EXPLORATION	TVD Reference:	Q-16-9-16 @ 5914.0ft (Original Well Elev)
Project:	USGS Myton SW (UT)	MD Reference:	Q-16-9-16 @ 5914.0ft (Original Well Elev)
Site:	SECTION 16 T9S, R16E	North Reference:	True
Well:	Q-16-9-16	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,200.0	14.64	227.52	5,071.8	-702.1	-766.8	1,039.7	0.00	0.00	0.00
5,300.0	14.64	227.52	5,168.6	-719.2	-785.4	1,065.0	0.00	0.00	0.00
5,400.0	14.64	227.52	5,265.3	-736.3	-804.1	1,090.2	0.00	0.00	0.00
5,500.0	14.64	227.52	5,362.1	-753.3	-822.7	1,115.5	0.00	0.00	0.00
5,600.0	14.64	227.52	5,458.8	-770.4	-841.3	1,140.8	0.00	0.00	0.00
5,700.0	14.64	227.52	5,555.6	-787.5	-860.0	1,166.0	0.00	0.00	0.00
5,800.0	14.64	227.52	5,652.4	-804.5	-878.6	1,191.3	0.00	0.00	0.00
5,900.0	14.64	227.52	5,749.1	-821.6	-897.2	1,216.6	0.00	0.00	0.00
6,000.0	14.64	227.52	5,845.9	-838.6	-915.9	1,241.8	0.00	0.00	0.00
6,100.0	14.64	227.52	5,942.6	-855.7	-934.5	1,267.1	0.00	0.00	0.00
6,112.8	14.64	227.52	5,955.0	-857.9	-936.9	1,270.3	0.00	0.00	0.00

API Well Number: 43013514490000



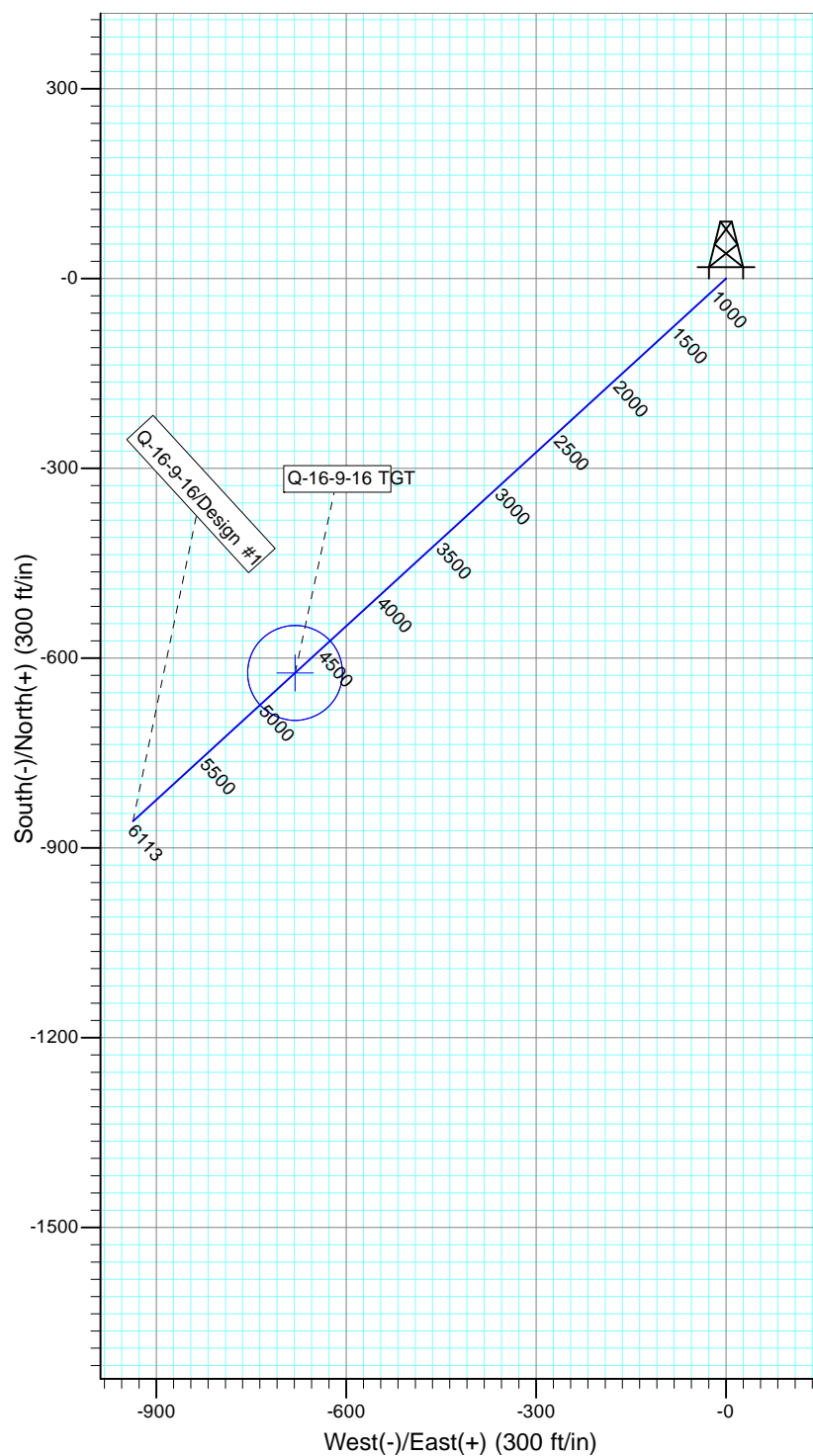
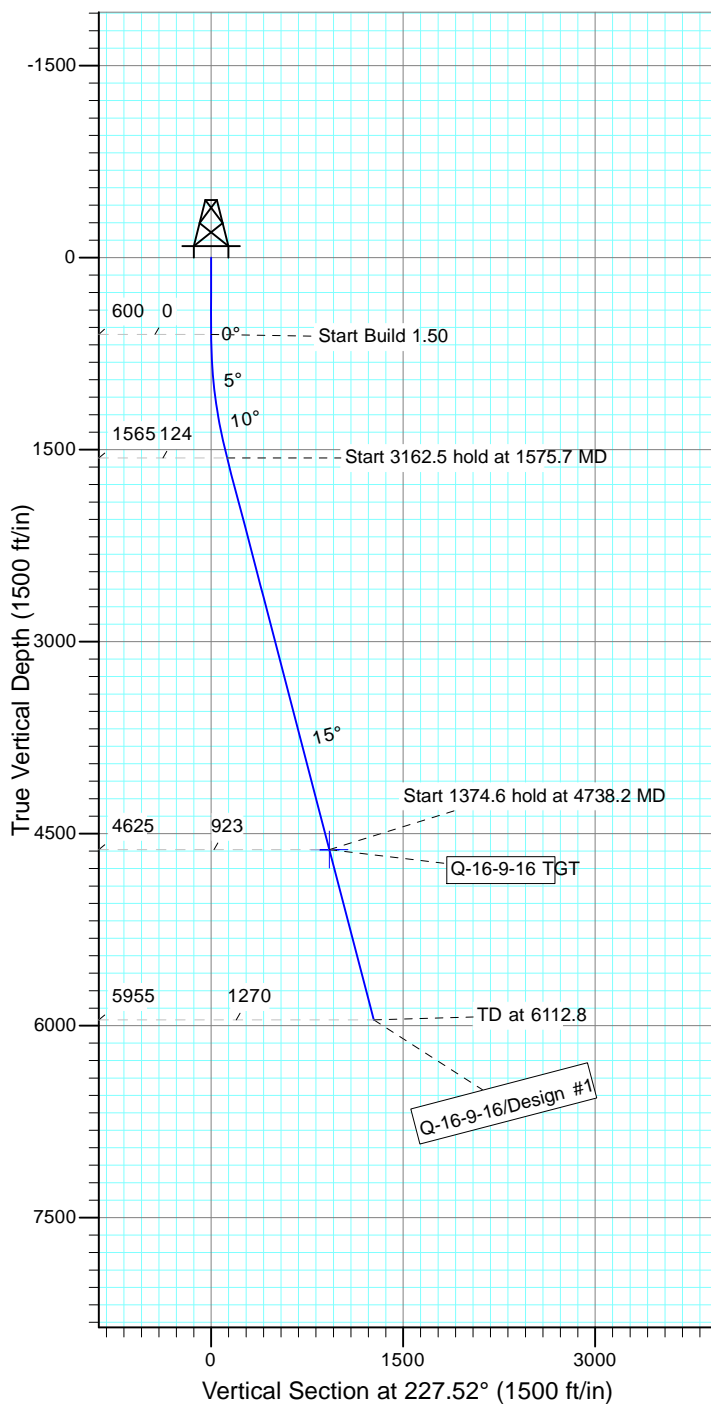
Project: USGS Myton SW (UT)
 Site: SECTION 16 T9S, R16E
 Well: Q-16-9-16
 Wellbore: Wellbore #1
 Design: Design #1



Azimuths to True North
 Magnetic North: 11.23°

Magnetic Field
 Strength: 52168.8snT
 Dip Angle: 65.75°
 Date: 4/9/2012
 Model: IGRF2010

KOP @ 600'
 DOGLEG RATE 1.5 DEG/100
 TARGET RADIUS IS 75'



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
Q-16-9-16 TGT	4625.0	-623.3	-680.7	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1575.7	14.64	227.52	1565.1	-83.7	-91.4	1.50	227.52	123.9	
4	4738.2	14.64	227.52	4625.0	-623.3	-680.7	0.00	0.00	923.0	Q-16-9-16 TGT
5	6112.8	14.64	227.52	5955.0	-857.9	-936.9	0.00	0.00	1270.3	



**NEWFIELD PRODUCTION COMPANY
GMBU Q-16-9-16
AT SURFACE: NE/SW SECTION 16, T9S, R16E
DUCHESNE COUNTY, UTAH**

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. EXISTING ROADS

See attached Topographic Map "A"

To reach Newfield Production Company well location site GMBU Q-16-9-16 located in the NE 1/4 SW 1/4 Section 16, T9S, R16E, Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.4 miles \pm to the junction of this highway and UT State Hwy 53; proceed southeasterly - 10.0 miles \pm to it's junction with an existing road to the southwest; proceed southwesterly - 6.1 miles \pm to it's junction with an existing road to the northwest; proceed in a northwesterly direction - 0.7 miles \pm to it's junction with the beginning of the access road to the existing 11-16-9-16 well pad.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal. Any necessary fill material for repair will be purchase and hauled from private sources.

2. PLANNED ACCESS ROAD

There is no proposed access road for this location. The proposed well will be drilled directionaly off of the existing 11-16-9-16 well pad. See attached **Topographic Map "B"**.

There will be **no** culverts required along this access road. There will be barrow ditches and turnouts as needed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

3. LOCATION OF EXISTING WELLS

Refer to Exhibit "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

There are no existing facilities that will be used by this well.

It is anticipated that this well will be a producing oil well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent (on site for six (6) months or longer) structures, constructed or installed (including pumping units), will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation.

5. **LOCATION AND TYPE OF WATER SUPPLY**

Newfield Production will transport water by truck from nearest water source as determined by a Newfield representative for the purpose of drilling the above mentioned well. The available water sources are as follows:

Johnson Water District
Water Right : 43-10136

Maurice Harvey Pond
Water Right: 47-1358

Neil Moon Pond
Water Right: 43-11787

Newfield Collector Well
Water Right: 47-1817 (A30414DVA, contracted with the Duchesne County Conservancy District).

There will be no water well drilled at this site.

6. **SOURCE OF CONSTRUCTION MATERIALS**

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road.

A mineral material application is not required for this location.

7. **METHODS FOR HANDLING WASTE DISPOSAL**

A small reserve pit (90' x 40' x 8' deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be required in the reserve pit. However, if upon constructing the pit there is insufficient fine clay and silt present, a liner will be used for the purpose of reducing water loss through percolation.

Newfield requests approval that a flare pit not be constructed or utilized on this location.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

8. **ANCILLARY FACILITIES**

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

9. WELL SITE LAYOUT

See attached Location Layout Sheet.

Fencing Requirements

All pits will be fenced according to the following minimum standards:

- a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.
- b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.
- c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times
- d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.
- e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Existing fences to be crossed by the access road will be braced and tied off before cutting so as to prevent slacking in the wire. The opening shall be closed temporarily as necessary during construction to prevent the escape of livestock, and upon completion of construction the fence shall be repaired to BLM specifications.

10. PLANS FOR RESTORATION OF SURFACE:

- a) Producing Location

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

- b) Dry Hole Abandoned Location

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

11. SURFACE OWNERSHIP – State of Utah.

11. OTHER ADDITIONAL INFORMATION :

- a) Newfield Production Company is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, Newfield is to immediately stop work that might further disturb such materials and contact the Authorized Officer.
- b) Newfield Production will control noxious weeds along rights-of-way for roads, pipelines, well sites or other applicable facilities. On State administered land it is required that a Pesticide Use Proposal shall be submitted and given approval prior to the application of herbicides or other possible hazardous chemicals.
- c) Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on State Lands after the conclusion of drilling operations or at any other time without State authorization. However, if State authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.

Water Disposal

After first production, if the production water meets quality guidelines, it will be transported to the Ashley, Monument Butte, Jonah, South Wells Draw and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project. Water not meeting quality criteria, will be disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E), Federally approved surface disposal facilities or at a State of Utah approved surface disposal facilities.

Additional Surface Stipulations

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations, Onshore Oil and Gas Orders, the approved plan of operations and any applicable Notice to Lessees. A copy of these conditions will be furnished to the field representative to ensure compliance.

Hazardous Material Declaration

Newfield Production Company guarantees that during the drilling and completion of the GMBU Q-16-9-16, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the GMBU Q-16-9-16, Newfield will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Newfield Production Company or a contractor employed by Newfield Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

13. LESSEE'S OR OPERATOR'S REPRESENTATIVE AND CERTIFICATION:

Representative

Name: Corie Miller

Address: Newfield Production Company
Route 3, Box 3630
Myton, UT 84052

Telephone: (435) 646-3721

Certification

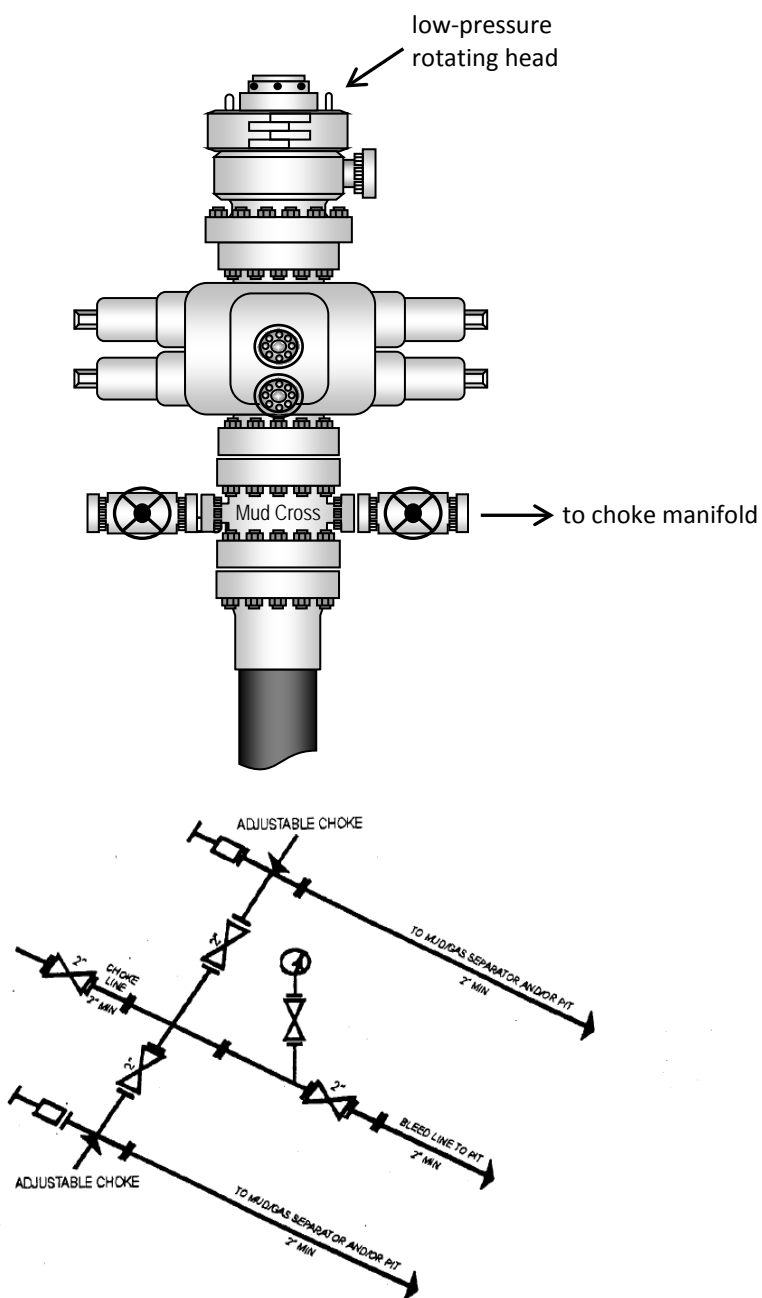
Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #Q-16-9-16, Section 16, Township 9S, Range 16E: Lease ML-16532 Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, Federal Bond #B001834.

I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of the 18 U.S.C. 1001 for the filing of a false statement.

5/23/12
Date

Mandie Crozier
Regulatory Analyst
Newfield Production Company

Typical 2M BOP stack configuration



2M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY

NEWFIELD EXPLORATION COMPANY

WELL PAD INTERFERENCE PLAT

11-16-9-16 (Existing Well)

N-16-9-16 (Proposed Well)

Q-16-9-16 (Proposed Well)

Pad Location: NESW Section 16, T9S, R16E, S.L.B.&M.



N42°44'54"W - 802.60'
(To Center of Pattern)
N42°44'54"W - 1039.19'
(To Bottom Hole)

Proposed Pit

Treater

Pump Jack

Existing Access

S89°30'43"W

11-16-9-16 (EXISTING)

N-16-9-16 (PROPOSED)

Q-16-9-16 (PROPOSED)

Existing Anchor
(Typ.)

Edge of
Existing Pad

S47°31'02"W - 923.00'
(To Center of Pattern)
S47°31'02"W - 1270.34'
(To Bottom Hole)

Note:
Bearings are
based on GPS
Observations.

RELATIVE COORDINATES From Top Hole to Bottom Hole

WELL	NORTH	EAST
N-16-9-16	763'	-705'
Q-16-9-16	-858'	-937'

RELATIVE COORDINATES From Top Hole to C.O.P.

WELL	NORTH	EAST
N-16-9-16	589'	-545'
Q-16-9-16	-623'	-681'

TOP HOLE FOOTAGES

N-16-9-16 (PROPOSED)
2111' FSL & 1881' FWL

Q-16-9-16 (PROPOSED)
2096' FSL & 1866' FWL

CENTER OF PATTERN FOOTAGES

N-16-9-16 (PROPOSED)
2570' FNL & 1345' FWL

Q-16-9-16 (PROPOSED)
1483' FSL & 1176' FWL

BOTTOM HOLE FOOTAGES

N-16-9-16 (PROPOSED)
2395' FNL & 1187' FWL

Q-16-9-16 (PROPOSED)
1252' FSL & 916' FWL

LATITUDE & LONGITUDE Surface position of Wells (NAD 83)

WELL	LATITUDE	LONGITUDE
11-16-9-16	40° 01' 46.02"	110° 07' 37.17"
N-16-9-16	40° 01' 45.87"	110° 07' 37.37"
Q-16-9-16	40° 01' 45.73"	110° 07' 37.56"

SURVEYED BY: C.S. DATE SURVEYED: 01-27-12
DRAWN BY: F.T.M. DATE DRAWN: 04-11-12
SCALE: 1" = 60' REVISED:

VERSION:
V2

Tri State
Land Surveying, Inc.

(435) 781-2501

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

RECEIVED: May 24, 2012

NEWFIELD EXPLORATION COMPANY

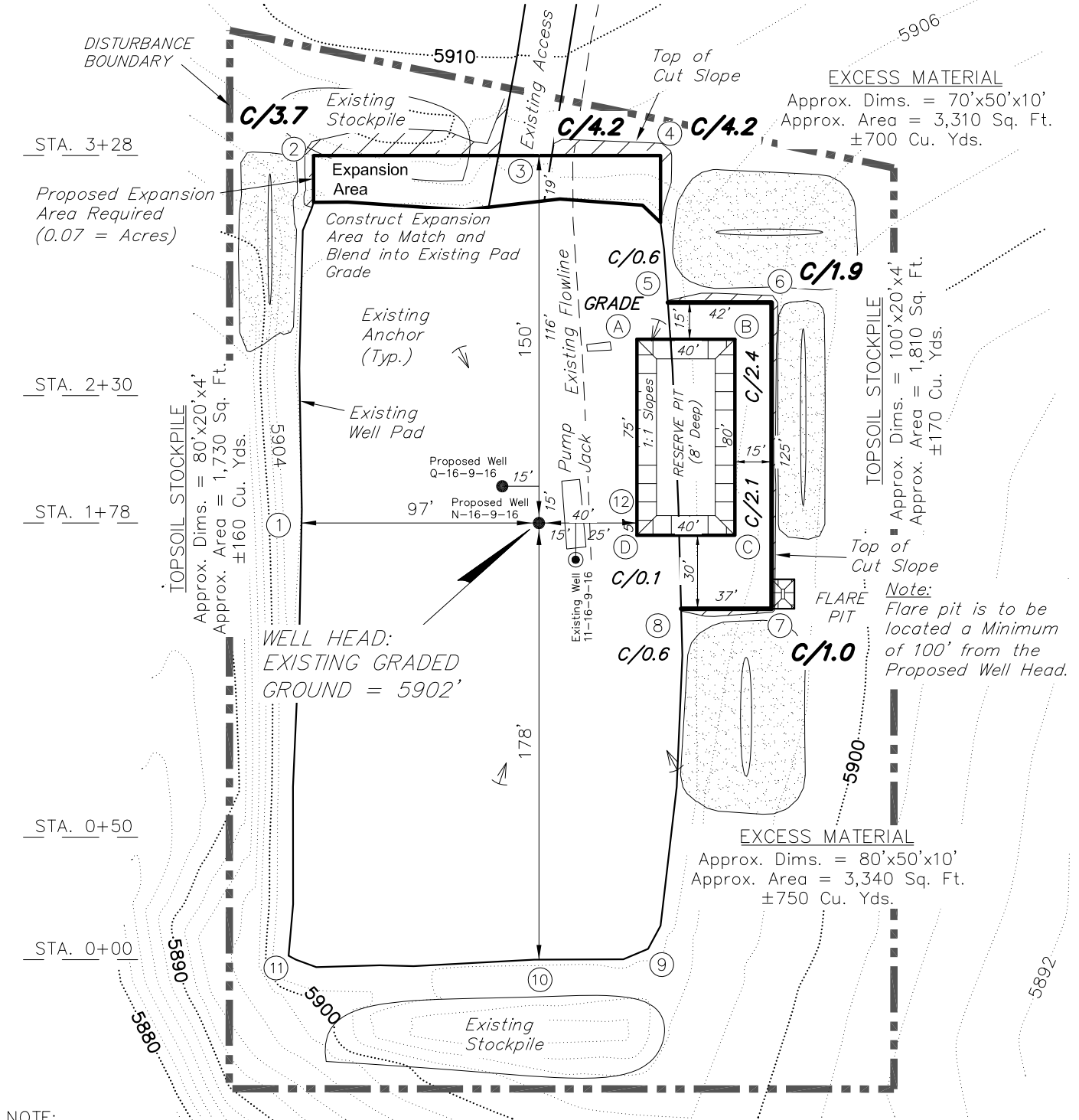
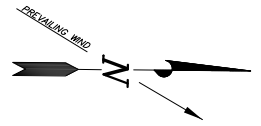
LOCATION LAYOUT

11-16-9-16 (Existing Well)

N-16-9-16 (Proposed Well)

Q-16-9-16 (Proposed Well)

Pad Location: NESW Section 16, T9S, R16E, S.L.B.&M.



NOTE:

The topsoil & excess material areas are calculated as being mounds containing 1,780 cubic yards of dirt (a 10% fluff factor is included). The mound areas are calculated with push slopes of 1.5:1 & fall slopes of 1.5:1.

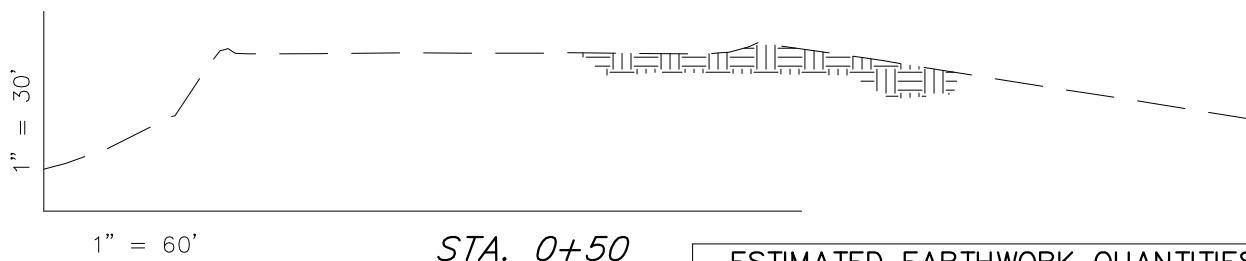
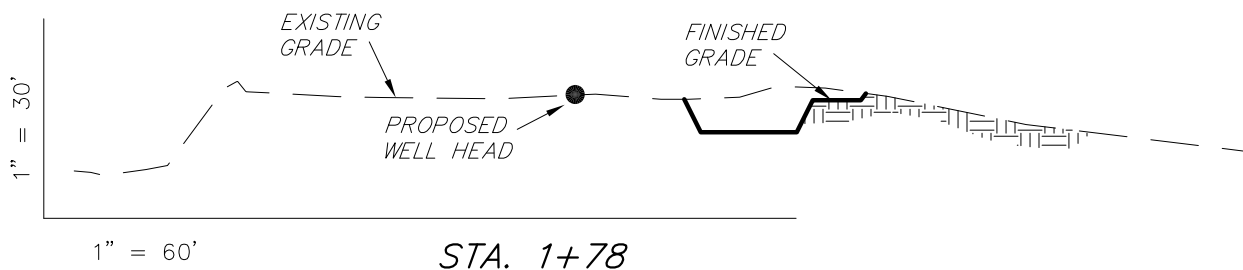
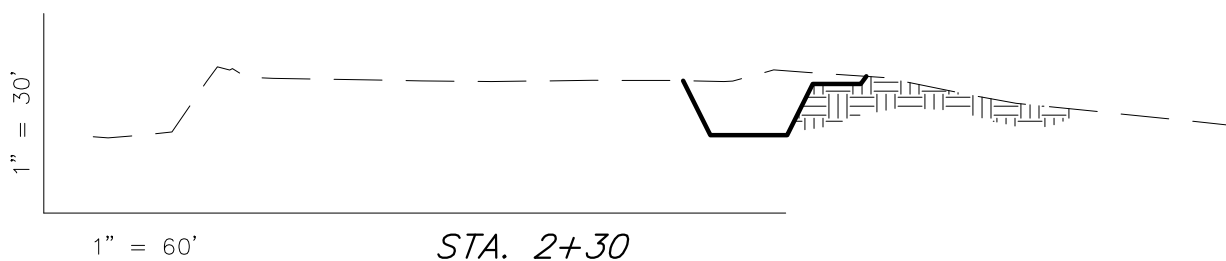
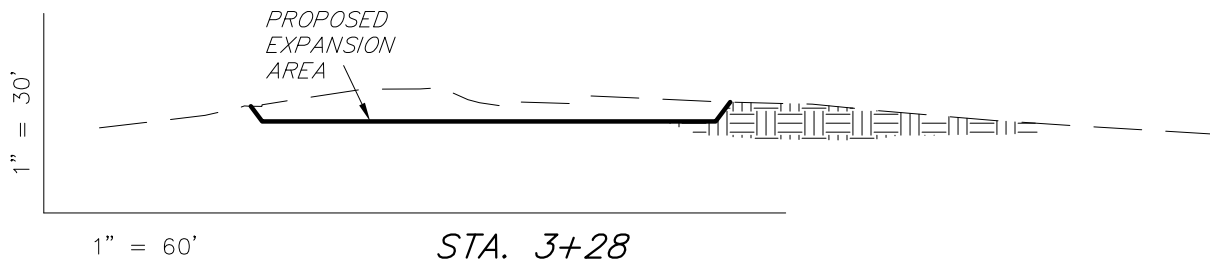
Note:

Topsoil to be Stripped From All New Construction Areas and Proposed Stock Pile Locations

SURVEYED BY: C.S.	DATE SURVEYED: 01-27-12	VERSION:
DRAWN BY: M.W.	DATE DRAWN: 02-13-12	V2
SCALE: 1" = 60'	REVISED: F.T.M. 04-11-12	

Tri State
Land Surveying, Inc.
(435) 781-2501
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

RECEIVED: May 24, 2012

NEWFIELD EXPLORATION COMPANY***CROSS SECTIONS******11-16-9-16 (Existing Well)******N-16-9-16 (Proposed Well)******Q-16-9-16 (Proposed Well)******Pad Location: NESW Section 16, T9S, R16E, S.L.B.&M.***

NOTE:
UNLESS OTHERWISE
NOTED ALL CUT/FILL
SLOPES ARE AT 1.5:1

ESTIMATED EARTHWORK QUANTITIES
(No Shrink or swell adjustments have been used)
(Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	630	0	Topsoil is not included in Pad Cut	630
PIT	690	0		690
TOTALS	1,320	0	300	1,320

SURVEYED BY: C.S.	DATE SURVEYED: 01-27-12	VERSION:
DRAWN BY: M.W.	DATE DRAWN: 02-13-12	V2
SCALE: 1" = 60'	REVISED: F.T.M. 04-11-12	

Tri State
Land Surveying, Inc.
180 NORTH VERNAL AVE. VERNAL, UTAH 84078
(435) 781-2501

RECEIVED: May 24, 2012

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

3160

(UT-922)

May 30, 2012

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2012 Plan of Development Greater Monument
Butte Unit, Duchesne and Uintah Counties,
Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2012 within the Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ GREEN RIVER)		
43-047-52760	GMBU I-2-9-17	Sec 02 T09S R17E 1611 FNL 2296 FEL
	BHL	Sec 02 T09S R17E 1194 FNL 1162 FEL
43-013-51447	GMBU N-16-9-16	Sec 16 T09S R16E 2111 FSL 1881 FWL
	BHL	Sec 16 T09S R16E 2395 FNL 1187 FWL
43-047-52761	GMBU L-2-9-17	Sec 02 T09S R17E 1632 FNL 2290 FEL
	BHL	Sec 02 T09S R17E 2335 FSL 1235 FEL
43-013-51448	GMBU G-16-9-16	Sec 16 T09S R16E 2081 FNL 0759 FWL
	BHL	Sec 16 T09S R16E 1039 FNL 1598 FWL
43-047-52762	GMBU M-2-9-17	Sec 02 T09S R17E 2067 FSL 1672 FWL
	BHL	Sec 02 T09S R17E 2500 FNL 2271 FEL
43-013-51449	GMBU Q-16-9-16	Sec 16 T09S R16E 2096 FSL 1866 FWL
	BHL	Sec 16 T09S R16E 1252 FSL 0916 FWL

This office has no objection to permitting the wells at this time.

Michael L. Coulthard

Digitally signed by Michael L. Coulthard
DN: cn=Michael L. Coulthard, o=Bureau of Land Management,
ou=Branch of Minerals, email=Michael_Coulthard@blm.gov, c=US
Date: 2012.05.30 11:42:03 -06'00'

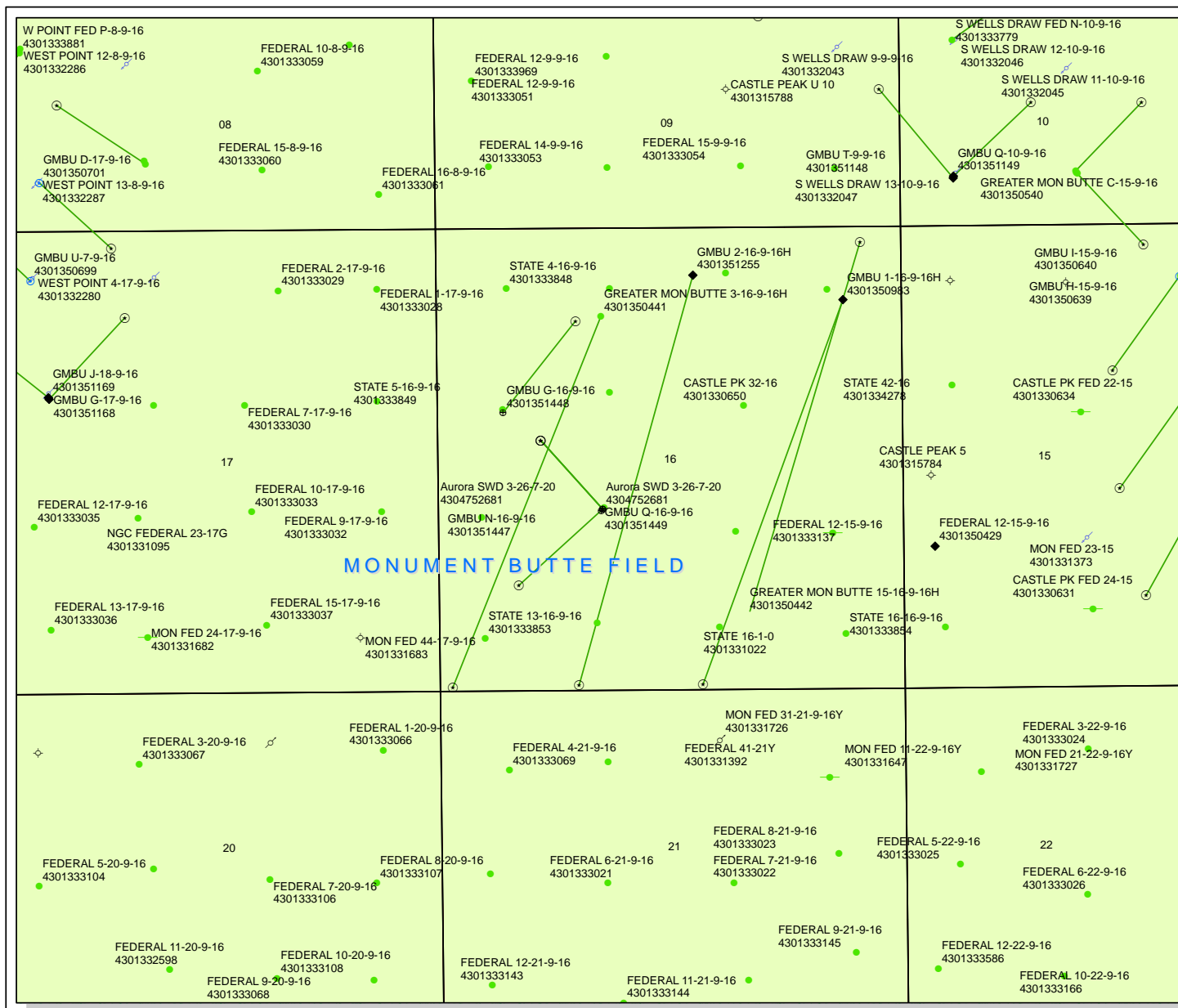
RECEIVED: May 30, 2012

API Well Number: 43013514490000

bcc: File - Greater Monument Butte Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron
Fluid Chron

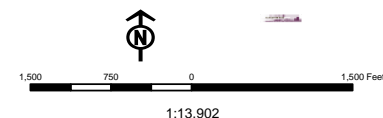
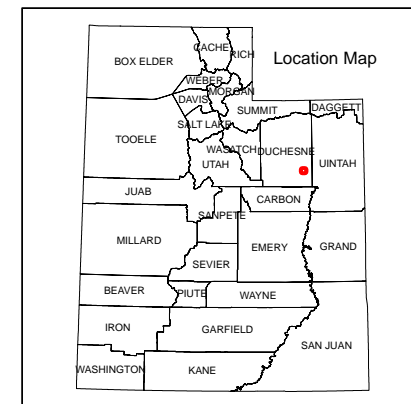
MCoulthard:mc:5-30-12

RECEIVED: May 30, 2012



API Number: 4301351449
Well Name: GMBU Q-16-9-16
Township T0.9 . Range R1.6 . Section 16
Meridian: SLBM
Operator: NEWFIELD PRODUCTION COMPANY
 Map Prepared:
 Map Produced by Diana Mason

Units Status	Wells Query Status
ACTIVE	APD - Approved Permit
EXPLORATORY	DRL - Spudded (Drilling Commenced)
GAS STORAGE	GIW - Gas Injection
NF PP OIL	GS - Gas Storage
NF SECONDARY	LOC - New Location
PI OIL	OPS - Operation Suspended
PP GAS	PA - Plugged Abandoned
PP GEOTHERMAL	PGW - Producing Gas Well
PP OIL	POW - Producing Oil Well
SECONDARY	SGW - Shut-in Gas Well
TERMINATED	SOW - Shut-in Oil Well
Unknown	TA - Temp. Abandoned
ABANDONED	TW - Test Well
ACTIVE	WDW - Water Disposal
COMBINED	WW - Water Injection Well
INACTIVE	WSW - Water Supply Well
STORAGE	
TERMINATED	



VIA ELECTRONIC DELIVERY



May 31, 2012

State of Utah, Division of Oil, Gas and Mining
ATTN: Diana Mason
P.O. Box 145801
Salt Lake City, UT 84114-5801

RE: Directional Drilling
GMBU Q-16-9-16
Greater Monument Butte (Green River) Unit

Surface Hole: T9S-R16E Section 16: NESW (ML-16532)
2096' FSL 1866' FWL

At Target: T9S-R16E Section 16: SWSW (ML-16532)
1252' FSL 916' FWL

Duchesne County, Utah

Dear Ms. Mason:

Pursuant to the filing by Newfield Production Company (NPC) of an Application for Permit to Drill the above referenced well dated 5/24/2012, a copy of which is attached, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole and target locations of this well are both within the boundaries of the Greater Monument Butte Unit (UTU-87538X), of which Newfield certifies that it is the operator. Further, Newfield certifies that all lands within 460 feet of the entire directional well bore are within the Greater Monument Butte Unit.

NPC is permitting this well as a directional well in order to mitigate surface disturbance by utilizing pre-existing roads and pipelines.

NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please contact the undersigned at 303-383-4121 or by email at lburget@newfield.com. Your consideration in this matter is greatly appreciated.

Sincerely,
Newfield Production Company

A handwritten signature in cursive script that reads "Leslie Burget".

Leslie Burget
Land Associate

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING						FORM 3 AMENDED REPORT <input type="checkbox"/>				
APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER GMBU Q-16-9-16				
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT MONUMENT BUTTE				
4. TYPE OF WELL Oil Well <input checked="" type="checkbox"/> Coalbed Methane Well: NO <input type="checkbox"/>						5. UNIT or COMMUNITIZATION AGREEMENT NAME GMBU (GRRV)				
6. NAME OF OPERATOR NEWFIELD PRODUCTION COMPANY						7. OPERATOR PHONE 435 646-4825				
8. ADDRESS OF OPERATOR Rt 3 Box 3630, Myton, UT, 84052						9. OPERATOR E-MAIL mcrozier@newfield.com				
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) ML-16532			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>				
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')				
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')				
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>				
20. LOCATION OF WELL		FOOTAGES		QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN		
LOCATION AT SURFACE		2096 FSL 1866 FWL		NESW	16	9.0 S	16.0 E	S		
Top of Uppermost Producing Zone		1667 FSL 1397 FWL		NESW	16	9.0 S	16.0 E	S		
At Total Depth		1252 FSL 916 FWL		SWSW	16	9.0 S	16.0 E	S		
21. COUNTY DUCHESE			22. DISTANCE TO NEAREST LEASE LINE (Feet) 916			23. NUMBER OF ACRES IN DRILLING UNIT 20				
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 992			26. PROPOSED DEPTH MD: 6113 TVD: 5955				
27. ELEVATION - GROUND LEVEL 5902			28. BOND NUMBER B001834			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 437478				
Hole, Casing, and Cement Information										
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
Surf	12.25	8.625	0 - 300	24.0	J-55 ST&C	8.3	Class G	138	1.17	15.8
Prod	7.875	5.5	0 - 6113	15.5	J-55 LT&C	8.3	Premium Lite High Strength	284	3.26	11.0
							50/50 Poz	363	1.24	14.3
ATTACHMENTS										
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES										
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER					<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN					
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)					<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER					
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
NAME Mandie Crozier				TITLE Regulatory Tech			PHONE 435 646-4825			
SIGNATURE				DATE 05/24/2012			EMAIL mcrozier@newfield.com			
API NUMBER ASSIGNED 43013514490000					APPROVAL					

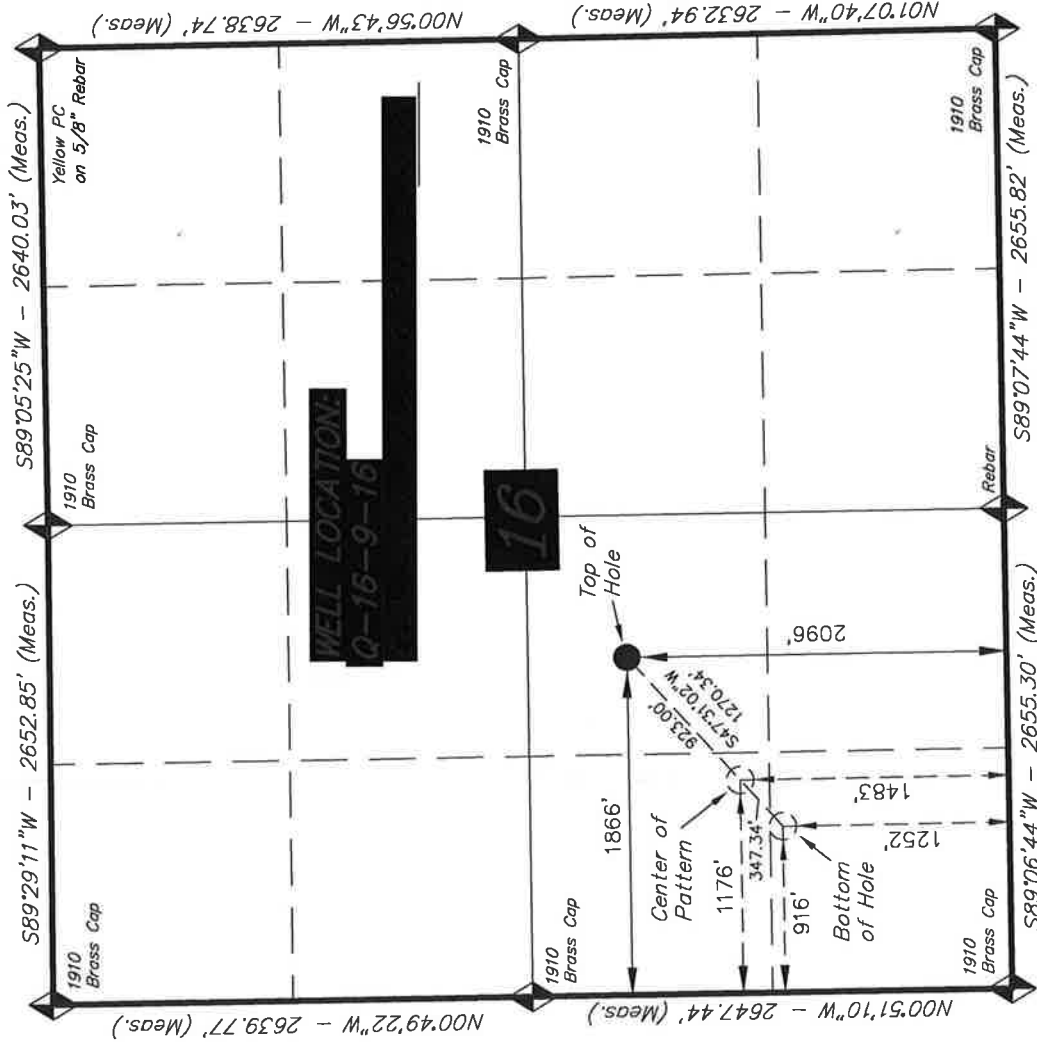
Received: May 25, 2012

T9S, R16E, S.L.B.&M.

NEWFIELD EXPLORATION COMPANY

WELL LOCATION, Q-16-9-16, LOCATED AS SHOWN IN THE NE 1/4 SW 1/4 OF SECTION 16, T9S, R16E, S.L.B.&M. DUCHESNE COUNTY, UTAH.

TARGET BOTTOM HOLE, Q-16-9-16, LOCATED AS SHOWN IN THE SW 1/4 SW 1/4 OF SECTION 16, T9S, R16E, S.L.B.&M. DUCHESNE COUNTY, UTAH.



SECTION CORNERS LOCATED

BASIS OF ELEV; Elevations are based on an N.G.S. OPUS Correction. LOCATION: LAT. 40°04'09.56" LONG. 110°00'43.28" (Tristate Aluminum Cap) Elev. 5281.57'

Q-16-9-16
(Surface Location) NAD 83
LATITUDE = 40° 01' 45.73"
LONGITUDE = 110° 07' 37.56"

NOTES:

1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

04-13-12

STACY W.

REGISTERED LAND SURVEYOR

REGISTRATION NO.

STATE OF UTAH

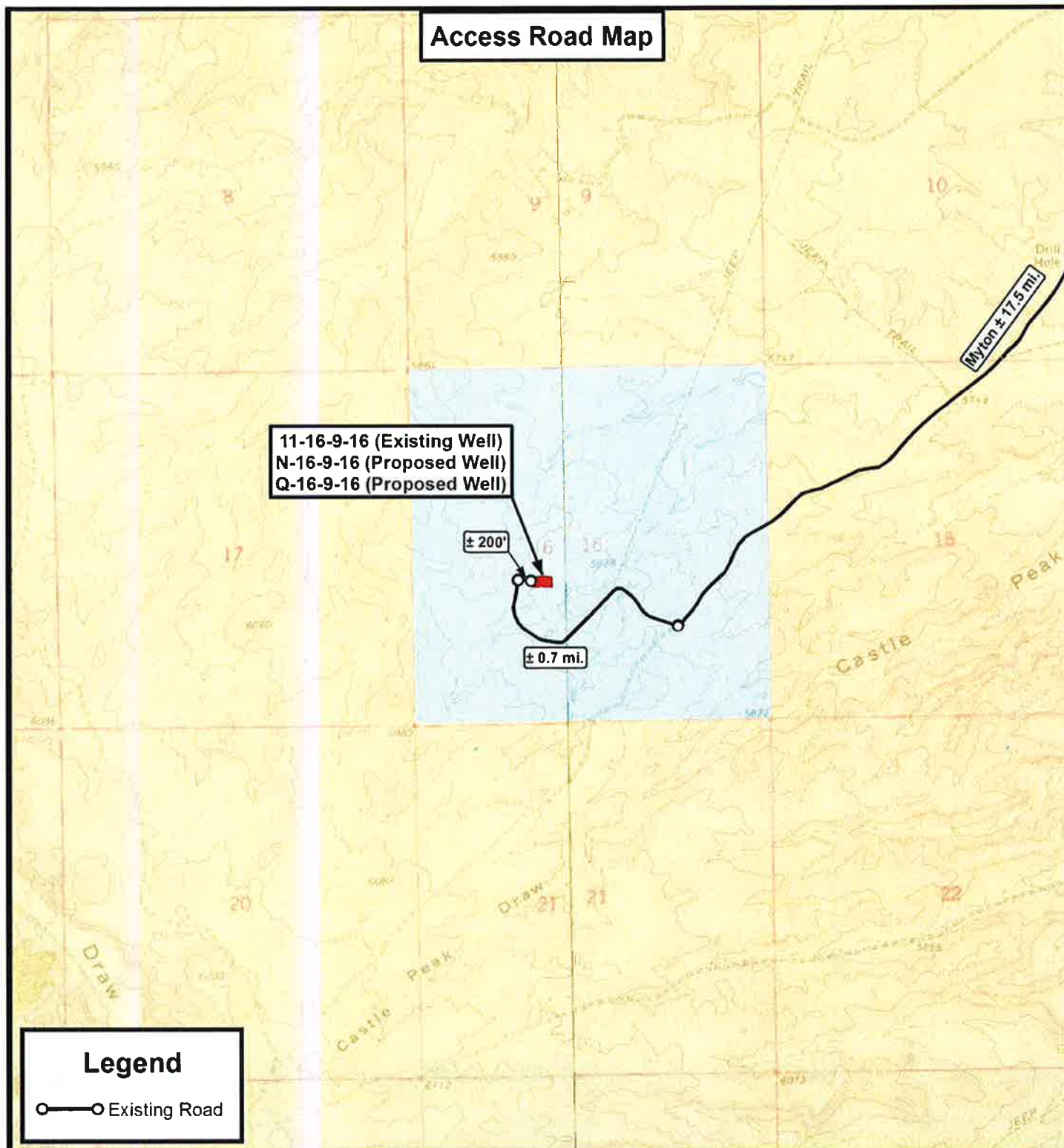
TRI STATE LAND SURVEYING & CONSULTING

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078

(435) 781-2501

DATE SURVEYED: 01-27-12	SURVEYED BY: C.S.	VERSION:
DATE DRAWN: 04-11-12	DRAWN BY: F.T.M.	V2
REVISED:	SCALE: 1" = 1000'	

Received: May 24, 2012



THE PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY TRI-STATE LAND SURVEYING, INC. - TRI-STATE DOES NOT WARRANTY PROPERTY PARCEL DATA OR ANY ASSOCIATED INFORMATION. A PROPERTY SURVEY IS REQUIRED TO DETERMINE THE ACTUAL LOCATION OF PROPERTY LINES AND SHOW ACCURATE DISTANCES ACROSS PARCELS.



**Tri State
Land Surveying, Inc.**

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501
F: (435) 781-2518



NEWFIELD EXPLORATION COMPANY

11-16-9-16 (Existing Well)
 N-16-9-16 (Proposed Well)
 Q-16-9-16 (Proposed Well)
 SEC. 16, T9S, R16E, S.L.B.&M. Duchesne County, UT.

DRAWN BY:	D.C.R.	REVISED:	04-11-12 D.C.R.
DATE:	02-14-2012		
SCALE:	1" = 2,000'		

V2

TOPOGRAPHIC MAP

SHEET

B

Received: May 24, 2012

From: Jeff Conley
To: Hill, Brad; Mason, Diana
CC: Bonner, Ed; Davis, Jim; Garrison, LaVonne; mcrozier@newfield.com
Date: 8/21/2012 2:59 PM
Subject: Newfield APD Approvals

The following wells have been approved by SITLA on the following conditons:

GMBU N-16-9-16 (4301351447) and GMBU Q-16-9-16 (4301351449): Paleo clearance is granted. Arch site needs to be avoided on both well sites as explained in email from Kristine Curry (SITLA). See email below.

GMBU G-16-9-16 (4301351448) Arch and Paleo clearance is granted.

Thanks,

Jeff Conley
SITLA Resource Specialist
(801)-538-5157
jconley@utah.gov

The following wells have been cleared with conditions for cultural resources:

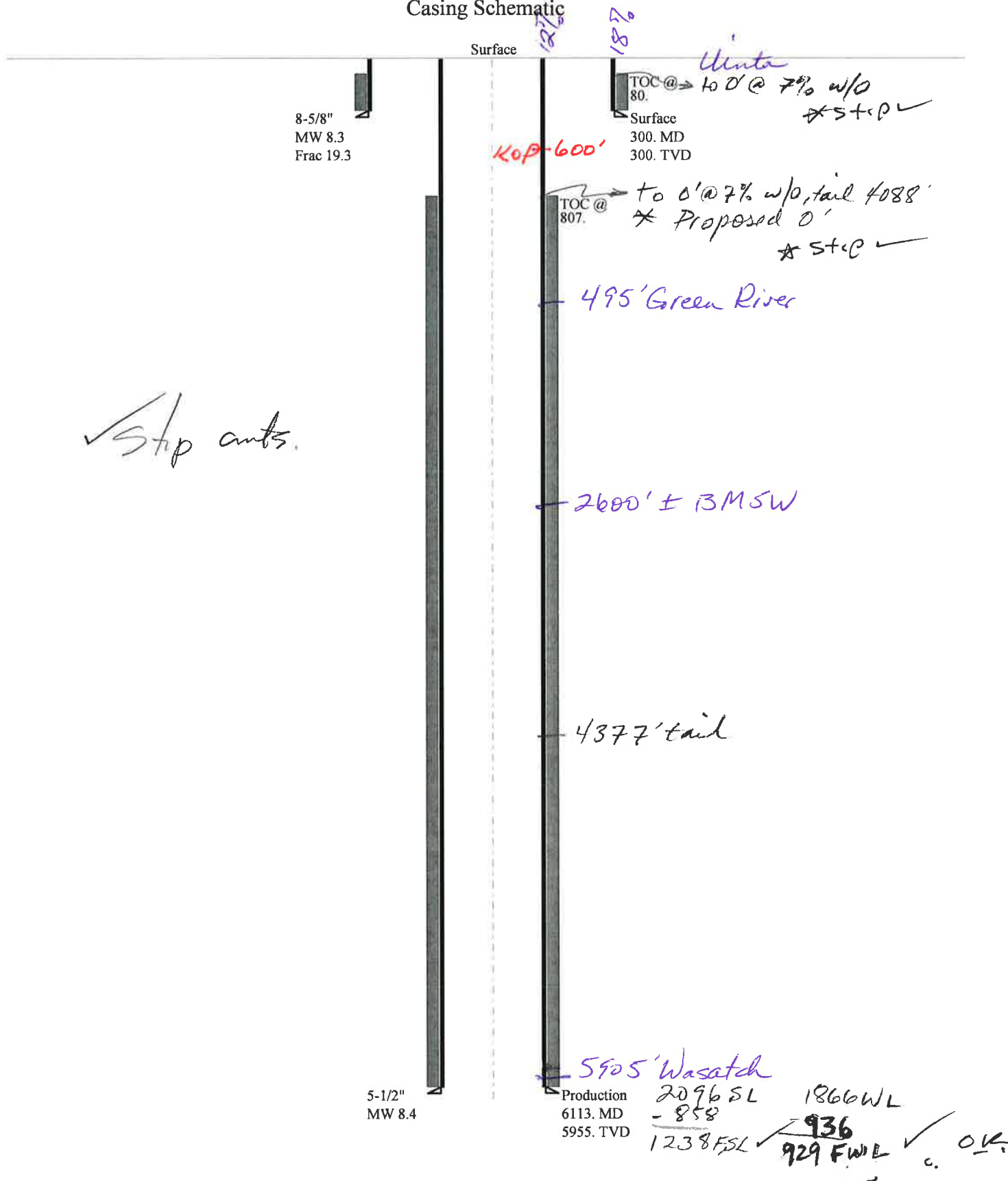
Newfield's GMBU N-16-9-16 [API #4301351447] (U-07-MQ-1297s; eligible site 42Dc2445 MUST be avoided)

Newfield's GMBU Q-16-9-16 [API #4301351449] (U-07-MQ-1297s; eligible site 42Dc2445 MUST be avoided)

Kristine

43013514490000 GMBU Q-16-9-16

Casing Schematic



Well name:	43013514490000 GMBU Q-16-9-16	
Operator:	NEWFIELD PRODUCTION COMPANY	
String type:	Surface	Project ID: 43-013-51449
Location:	DUCHESNE COUNTY	

Design parameters:**Collapse**

Mud weight: 8.330 ppg
Design is based on evacuated pipe.

Minimum design factors:**Collapse:**

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 78 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: 80 ft

Burst

Max anticipated surface pressure: 264 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 300 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.70 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on air weight.
Neutral point: 262 ft

Non-directional string.**Re subsequent strings:**

Next setting depth: 5,955 ft
Next mud weight: 8.400 ppg
Next setting BHP: 2,599 psi
Fracture mud wt: 19,250 ppg
Fracture depth: 300 ft
Injection pressure: 300 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	300	8.625	24.00	J-55	ST&C	300	300	7.972	1544

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	130	1370	10.557	300	2950	9.83	7.2	244	33.90 J

Prepared by: Helen Sadik-Macdonald
Div of Oil, Gas & Mining

Phone: 801 538-5357
FAX: 801-359-3940

Date: August 15, 2012
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 300 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	43013514490000 GMBU Q-16-9-16	
Operator:	NEWFIELD PRODUCTION COMPANY	
String type:	Production	Project ID: 43-013-51449
Location:	DUCHESNE COUNTY	

Design parameters:**Collapse**

Mud weight: 8.400 ppg
Design is based on evacuated pipe.

Minimum design factors:**Collapse:**

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 157 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,000 ft

Cement top: 807 ft

Burst

Max anticipated surface pressure: 1,288 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 2,599 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Directional Info - Build & Hold

Kick-off point 600 ft
Departure at shoe: 1271 ft
Maximum dogleg: 1.5 °/100ft
Inclination at shoe: 14.64 °

Tension is based on air weight.
Neutral point: 5,331 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	6113	5.5	15.50	J-55	LT&C	5955	6113	4.825	21585

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	2599	4040	1.555	2599	4810	1.85	92.3	217	2.35 J

Prepared by: Helen Sadik-Macdonald
Div of Oil, Gas & Mining

Phone: 801 538-5357
FAX: 801-359-3940

Date: August 15, 2012
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 5955 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator NEWFIELD PRODUCTION COMPANY
Well Name GMBU Q-16-9-16
API Number 43013514490000 **APD No** 6065 **Field/Unit** MONUMENT BUTTE
Location: 1/4,1/4 NESW **Sec** 16 **Tw** 9.0S **Rng** 16.0E 2096 FSL 1866 FWL
GPS Coord (UTM) 574479 4431383 **Surface Owner**

Participants

C. Miller - Newfield ; C. Jensen - DOGM ; A. Hansen - DWR

Regional/Local Setting & Topography

Location originally presited by F. Barlett for the host well 11-16-9-16. The original description follows;

The general area is approximately 22 miles southwest of Myton, Utah in the upper Castle Peak area. Castle Peak Draw runs in a northeasterly direction about 14 miles and joins Pariette Draw. Pariette Draw continues in a southeasterly direction about 6 miles and joins the Green River about 6 miles below Ouray Utah. Pariette Draw contains a perennial stream somewhat consisting of irrigation runoff and seepage. No streams springs or seeps occur in the area. An occasional pond constructed to store runoff for livestock or wildlife exists. Drainages are ephemeral only flowing during spring snowmelt or following intense summer rainstorms. Broad flats or rolling topography intersected by drainages with gentle to moderate side-slopes characterize the area. Access to the area from Myton, Utah is following State of Utah Hwy. 40 and Duchesne County and oilfield development roads a distance of 22.2 miles. Construction of 220 feet of new road will be required.

Surface Use Plan

Current Surface Use

Existing Well Pad

New Road Miles	Well Pad	Src Const Material	Surface Formation
	Width 200 Length 300		UNTA

Ancillary Facilities N

Waste Management Plan Adequate? Y

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Disturbed soils do not support habitat for wildlife. DWR had no comment / issues

Soil Type and Characteristics

imported gravels

Erosion Issues N

Sedimentation Issues N**Site Stability Issues** N**Drainage Diversion Required?** N**Berm Required?** Y**Erosion Sedimentation Control Required?** N**Paleo Survey Run?** N **Paleo Potential Observed?** N **Cultural Survey Run?** N **Cultural Resources?** N**Reserve Pit****Site-Specific Factors****Site Ranking**

Distance to Groundwater (feet)	100 to 200	5
Distance to Surface Water (feet)	>1000	0
Dist. Nearest Municipal Well (ft)	>5280	0
Distance to Other Wells (feet)		20
Native Soil Type	Mod permeability	10
Fluid Type	Fresh Water	5
Drill Cuttings	Normal Rock	0
Annual Precipitation (inches)	10 to 20	5
Affected Populations		
Presence Nearby Utility Conduits	Not Present	0
Final Score		45 1 Sensitivity Level

Characteristics / Requirements

A 40' x 80' x 8' deep reserve pit is planned in an area of cut on the north side of the location. A pit liner is required. Pit should be fenced to prevent entry by deer, other wildlife and domestic animals. Pit to be closed within one year after drilling activities are complete. Operator commonly uses a 30 mil liner.

Closed Loop Mud Required? N **Liner Required?** Y **Liner Thickness** 16 **Pit Underlayment Required?** N**Other Observations / Comments**Chris Jensen
Evaluator6/8/2012
Date / Time

Application for Permit to Drill

Statement of Basis

Utah Division of Oil, Gas and Mining

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
6065	43013514490000	SITLA	OW	S	No
Operator	NEWFIELD PRODUCTION COMPANY		Surface Owner-APD		
Well Name	GMBU Q-16-9-16		Unit	GMBU (GRRV)	
Field	MONUMENT BUTTE		Type of Work	DRILL	
Location	NESW 16 9S 16E S 2096 FSL 1866 FWL GPS Coord (UTM) 574474E 4431373N				

Geologic Statement of Basis

Newfield proposes to set 300' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 2,600'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 16. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought high enough to cover the estimated base of the moderately saline ground water.

Brad Hill
APD Evaluator

6/19/2012
Date / Time

Surface Statement of Basis

A. Hansen - DWR Biologist has no wildlife issues with the location.

Original Statement of Basis follows;

The proposed State #11-16-9-16 oil well location is in rolling terrain where the top of a narrow gentle sloping ridge top will be rounded off. This ridge runs in a northeasterly direction. It slopes moderately to gently on the south side where filling will occur. It also slopes off beyond the location to the east where a moderately deep draws runs in a northerly direction. Fill from the location will not extend to this draw. A swale on the west portion of the location will be filled but no diversion is needed. The surface of the pit is at grade level. The selected site poses no apparent surface concerns and appears to be a good location for constructing a pad, drilling and operating a well. The area was covered with about 10 inches of snow during the evaluation. Both the surface and minerals are owned by SITLA.

Daniel Emmett representing the Utah Division of Wildlife Resources stated the area is classified as substantial value sage grouse brooding habitat and crucial yearlong antelope habitat. He asked Mr. Allred of Newfield and Mr. Davis of SITLA that they try to schedule construction and drilling around the critical period of March 1 to June 15th for sagegrouse brooding. No restrictions for the antelope were requested. A golden eagle nest of unknown status is located in sight to the northeast of the location. A timing restriction of Feb 1 to July 15th was recommended. No other wildlife are expected to be significantly affected. Mr. Emmett gave Mr. Allred of Newfield Production Company and Mr. Davis of SITLA a copy of his evaluation and also a seed mix recommendation to be used when the reserve pit and location are reclaimed.

Chris Jensen
Onsite Evaluator

6/8/2012
Date / Time

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 16 mils shall be properly installed and maintained in the reserve pit.
Surface	The reserve pit shall be fenced upon completion of drilling operations.
Surface	The well site shall be bermed to prevent fluids from leaving the pad.

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 5/24/2012

API NO. ASSIGNED: 43013514490000

WELL NAME: GMBU Q-16-9-16

OPERATOR: NEWFIELD PRODUCTION COMPANY (N2695)

PHONE NUMBER: 435 646-4825

CONTACT: Mandie Crozier

PROPOSED LOCATION: NESW 16 090S 160E

Permit Tech Review: ☒

SURFACE: 2096 FSL 1866 FWL

Engineering Review: ☒

BOTTOM: 1252 FSL 0916 FWL

Geology Review: ☒

COUNTY: DUCHESNE

LATITUDE: 40.02929

LONGITUDE: -110.12716

UTM SURF EASTINGS: 574474.00

NORTHINGS: 4431373.00

FIELD NAME: MONUMENT BUTTE

LEASE TYPE: 3 - State

LEASE NUMBER: ML-16532

PROPOSED PRODUCING FORMATION(S): GREEN RIVER

SURFACE OWNER: 3 - State

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

☒ PLAT☒ Bond: STATE/FEE - B001834☐ Potash☐ Oil Shale 190-5☐ Oil Shale 190-3☐ Oil Shale 190-13☒ Water Permit: 437478☐ RDCC Review:☐ Fee Surface Agreement☐ Intent to Commingle

Commingling Approved

LOCATION AND SITING:

☐ R649-2-3.

Unit: GMBU (GRRV)

☐ R649-3-2. General☐ R649-3-3. Exception☒ Drilling Unit

Board Cause No: Cause 213-11

Effective Date: 11/30/2009

Siting: Suspends General Siting

☒ R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 5 - Statement of Basis - bhill
12 - Cement Volume (3) - hmacdonald
15 - Directional - dmason
25 - Surface Casing - hmacdonald
27 - Other - bhill

RECEIVED: September 13, 2012



GARY R. HERBERT
Governor

GREGORY S. BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: GMBU Q-16-9-16
API Well Number: 43013514490000
Lease Number: ML-16532
Surface Owner: STATE
Approval Date: 9/13/2012

Issued to:

NEWFIELD PRODUCTION COMPANY , Rt 3 Box 3630 , Myton, UT 84052

Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 213-11. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Production casing cement shall be brought up to or above the top of the unitized interval for the Greater Monument Butte Unit (Cause No. 213-11).

Cement volume for the 5 1/2 production string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to 0' MD as indicated in the submitted drilling plan.

Surface casing shall be cemented to the surface.

Additional Approvals:

The operator is required to obtain approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan - contact Dustin Doucet
- Significant plug back of the well - contact Dustin Doucet
- Plug and abandonment of the well - contact Dustin Doucet

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels
OR
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website
at <http://oilgas.ogm.utah.gov>
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing - contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program
 - contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well - contact Dan Jarvis

Contact Information:

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office
801-231-8956 - after office hours

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

Approved By:

Approved By:

A handwritten signature in black ink, appearing to read "J. Rogers", written over a horizontal line.

For John Rogers
Associate Director, Oil & Gas

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: ML-16532
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
1. TYPE OF WELL Oil Well		7. UNIT or CA AGREEMENT NAME: GMBU (GRRV)
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY		8. WELL NAME and NUMBER: GMBU Q-16-9-16
3. ADDRESS OF OPERATOR: Rt 3 Box 3630, Myton, UT, 84052		9. API NUMBER: 43013514490000
PHONE NUMBER: 435 646-4825 Ext		9. FIELD and POOL or WILDCAT: MONUMENT BUTTE
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2096 FSL 1866 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 16 Township: 09.0S Range: 16.0E Meridian: S		COUNTY: DUCHESNE
		STATE: UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 9/13/2013	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER: <input type="text"/>
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Newfield proposes to extend the Application for Permit to Drill this well.

**Approved by the
Utah Division of
Oil, Gas and Mining**

Date: August 15, 2013

By: 

NAME (PLEASE PRINT) Mandie Crozier	PHONE NUMBER 435 646-4825	TITLE Regulatory Tech
SIGNATURE N/A	DATE 8/15/2013	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43013514490000

API: 43013514490000

Well Name: GMBU Q-16-9-16

Location: 2096 FSL 1866 FWL QTR NESW SEC 16 TWNP 090S RNG 160E MER S

Company Permit Issued to: NEWFIELD PRODUCTION COMPANY

Date Original Permit Issued: 9/13/2012

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? ☒ Yes ☐ No
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? ☐ Yes ☒ No
- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? ☐ Yes ☒ No
- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? ☐ Yes ☒ No
- Has the approved source of water for drilling changed? ☐ Yes ☒ No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? ☐ Yes ☒ No
- Is bonding still in place, which covers this proposed well? ☒ Yes ☐ No

Signature: Mandie Crozier

Date: 8/15/2013

Title: Regulatory Tech **Representing:** NEWFIELD PRODUCTION COMPANY

BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration Rig Name/# Ross 29 Submitted By
Branden Arnold Phone Number 435-401-0223
Well Name/Number GMBU Q-16-9-16
Qtr/Qtr NE/SW Section 16 Township 9S Range 16E
Lease Serial Number ML-16532
API Number 43-013-51449

Spud Notice – Spud is the initial spudding of the well, not drilling
out below a casing string.

Date/Time 12/20/13 7:00 AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing
times.

- ☐ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

Date/Time 12/20/13 3:00 AM ☐ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

RECEIVED

DEC 19 2013

DIV. OF OIL, GAS & MINING

Date/Time _____ AM ☐ PM ☐

Remarks _____

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: ML-16532
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY		7. UNIT or CA AGREEMENT NAME: GMBU (GRRV)
3. ADDRESS OF OPERATOR: Rt 3 Box 3630, Myton, UT, 84052		8. WELL NAME and NUMBER: GMBU Q-16-9-16
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2096 FSL 1866 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 16 Township: 09.0S Range: 16.0E Meridian: S		9. API NUMBER: 43013514490000
PHONE NUMBER: 435 646-4825 Ext		9. FIELD and POOL or WILDCAT: MONUMENT BUTTE
COUNTY: DUCHESNE		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 12/20/2013	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

 On 12/20/13 Drill and set 5' of 14" conductor. Drill F/5' to 331 KB of 12 1/4 hole. P/U and run 7 joints of 8 5/8 casing set depth 326'KB. On 12/23/2013 Cement W/180 sx of 15.8# 1.17 yield G Neat cement returned 6 bbls and bumped plug to 500 psi.

Accepted by the
 Utah Division of
 Oil, Gas and Mining
FOR RECORD ONLY
 January 08, 2014

NAME (PLEASE PRINT) Cherei Neilson	PHONE NUMBER 435 646-4883	TITLE Drilling Technician
SIGNATURE N/A	DATE 1/8/2014	

NEWFIELD**Casing****Conductor**

Legal Well Name GMBU Q-16-9-16		Wellbore Name Original Hole	
API/UWI 43013514490000	Surface Legal Location NESW 2096 FSL 1866 FWL Sec 16 T9S R16E	Field Name GMBU CTB5	Well Type Development
Well RC 500343119	County Duchesne	State/Province Utah	Spud Date 12/20/2013 10:00
		Well Configuration Type Slant	
		Final Rig Release Date	

Wellbore					
Wellbore Name Original Hole				Kick Off Depth (ftKB)	
Section Des	Size (in)	Actual Top Depth (MD) (ftKB)	Actual Bottom Depth (MD) (ftKB)	Start Date	End Date
Conductor	14	10	15	12/20/2013	12/20/2013
Vertical	12 1/4	15	331	12/20/2013	12/20/2013

Wellhead			
Type	Install Date	Service	Comment

Wellhead Components				
Des	Make	Model	SN	WP Top (psi)

Casing			
Casing Description Conductor	Set Depth (ftKB) 15	Run Date 12/20/2013	Set Tension (kips)
Centralizers	Scratchers		

Casing Components												
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Jts	Len (ft)	Top (ftKB)	Btm (ftKB)	Mk-up Tq (ft•lb)	Class	Max OD (in)
Conductor	14	13.500	36.75	H-40		1	5.00	10.0	15.0			

Jewelry Details									
External Casing Packer									
Type	Setting Requirement	Release Requirements			Inflation Method	Vol Inflation (gal)	Equiv Hole Sz (in)		
Inflation Fluid Type	Infl FI Dens (lb/gal)	P AV Set (psi)	AV Acting Pressure (psi)	P ICV Set (psi)	P ICV Act (psi)	ECP Load (1000lbf)	Seal Load (1000lbf)		

Slotted Liner							
% Open Area (%)	Perforation Min Dimension (in)	Perforation Max Dimension (in)	Axial Perf Spacing (ft)	Perf Rows	Blank Top Length (ft)	Blank Bottom Length (ft)	
Slot Description	Slot Pattern			Slot Length (in)	Slot Width (in)	Slot Frequency	Screen Gauge (ga)

Liner Hanger					
Retrievable?	Elastomer Type	Element Center Depth (ft)		Polish Bore Size (in)	Polish Bore Length (ft)
Slip Description				Set Mechanics	
Setting Procedure					
Unsetting Procedure					

NEWFIELD**Casing****Surface**

Legal Well Name GMBU Q-16-9-16		Wellbore Name Original Hole	
API/UWI 43013514490000	Surface Legal Location NESW 2096 FSL 1866 FWL Sec 16 T9S R16E	Field Name GMBU CTB5	Well Type Development
Well RC 500343119	County Duchesne	State/Province Utah	Spud Date 12/20/2013 10:00
		Well Configuration Type Slant	
		Final Rig Release Date	

Wellbore					
Wellbore Name Original Hole				Kick Off Depth (ftKB)	
Section Des	Size (in)	Actual Top Depth (MD) (ftKB)	Actual Bottom Depth (MD) (ftKB)	Start Date	End Date
Conductor	14	10	15	12/20/2013	12/20/2013
Vertical	12 1/4	15	331	12/20/2013	12/20/2013

Wellhead				
Type	Install Date	Service	Comment	

Wellhead Components				
Des	Make	Model	SN	WP Top (psi)

Casing				
Casing Description Surface	Set Depth (ftKB) 326	Run Date 12/20/2013	Set Tension (kips)	
Centralizers 3	Scratchers			

Casing Components												
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Jts	Len (ft)	Top (ftKB)	Btm (ftKB)	Mk-up Tq (ft•lb)	Class	Max OD (in)
Wellhead	8 5/8	8.097	24.00	J-55		1	2.00	10.0	12.0			
Cut off	8 5/8	8.097	24.00	J-55		1	42.75	12.0	54.8			
Casing Joints	8 5/8	8.097	24.00	J-55		5	223.55	54.8	278.3			
Float Joint	8 5/8	8.097	24.00	J-55		1	1.00	278.3	279.3			
Shoe Joint	8 5/8	8.097	24.00	J-55		1	44.79	279.3	324.1			
Guide Shoe	8 5/8	8.097	24.00	J-55		1	1.50	324.1	325.6			

Jewelry Details									
External Casing Packer									
Type	Setting Requirement	Release Requirements			Inflation Method	Vol Inflation (gal)	Equiv Hole Sz (in)		
Inflation Fluid Type	Infl Fl Dens (lb/gal)	P AV Set (psi)	AV Acting Pressure (psi)	P ICV Set (psi)	P ICV Act (psi)	ECP Load (1000lbf)	Seal Load (1000lbf)		

Slotted Liner							
% Open Area (%)	Perforation Min Dimension (in)	Perforation Max Dimension (in)	Axial Perf Spacing (ft)	Perf Rows	Blank Top Length (ft)	Blank Bottom Length (ft)	
Slot Description	Slot Pattern			Slot Length (in)	Slot Width (in)	Slot Frequency	Screen Gauge (ga)

Liner Hanger				
Retrievable?	Elastomer Type	Element Center Depth (ft)	Polish Bore Size (in)	Polish Bore Length (ft)
Slip Description			Set Mechanics	
Setting Procedure				
Unsetting Procedure				

NEWFIELD



Schematic

43-013-51449

Well Name: GMBU Q-16-9-16

Surface Legal Location NESW 2096 FSL 1866 FWL Sec 16 T9S R16E	API/UWI 43013514490000	Well RC 500343119	Lease ML-16532	State/Province Utah	Field Name GMBU CTB5	County Duchesne
Spud Date 12/20/2013	Rig Release Date 1/15/2014	On Production Date	Original KB Elevation (ft) 5,912	Ground Elevation (ft) 5,902	Total Depth All (TVD) (ftKB) Original Hole - 6,020.9	PBTD (All) (ftKB) Original Hole - 6,132.3

Most Recent Job

Job Category Initial Completion	Primary Job Type Fracture Treatment	Secondary Job Type P&P	Job Start Date 1/28/2014	Job End Date 2/6/2014
------------------------------------	--	---------------------------	-----------------------------	--------------------------

TD: 6,185.0

Slant - Original Hole, 3/19/2014 12:02:22 PM

MD (ftKB)	TVD (ftKB)	Incl (°)	DLS	Vertical schematic (actual)
9.8	9.9	0.8	DLS (°... 0 — 4	1-1; Tubing Hanger; 7 1/16; 2.875; 10-11; 0.90
12.1	12.2	0.8		1; Conductor; 14 in; 13.500 in; 10-15 ftKB; 5.00 ft
15.1	15.1	0.8		2; Surface; 8 5/8 in; 8.097 in; 10-326 ftKB; 315.59 ft
32.2	32.2	0.8		1-2; Tubing; 2 7/8; 2.441; 11-5,662; 5,651.20
54.8	54.8	0.8		Perforated; 4,172-4,173; 1/30/2014
279.2	279.2	0.8		Perforated; 4,180-4,181; 1/30/2014
325.5	325.5	0.8		Perforated; 4,190-4,194; 1/30/2014
1,964.9	1,941.6	15.2		Perforated; 4,734-4,736; 1/30/2014
3,450.8	3,375.4	15.6		Perforated; 4,800-4,802; 1/30/2014
4,172.9	4,073.6	15.3		Perforated; 4,808-4,810; 1/30/2014
4,181.1	4,081.6	15.3		Perforated; 5,094-5,095; 1/29/2014
4,193.9	4,093.9	15.2		Perforated; 5,102-5,104; 1/29/2014
4,735.9	4,620.0	14.3		Perforated; 5,122-5,124; 1/29/2014
4,801.8	4,683.9	14.6		Perforated; 5,134-5,136; 1/29/2014
4,810.0	4,691.8	14.7		Perforated; 5,200-5,201; 1/29/2014
5,094.2	4,967.2	13.8		Perforated; 5,218-5,219; 1/29/2014
5,102.0	4,974.8	14.0		Perforated; 5,240-5,241; 1/29/2014
5,122.0	4,994.2	14.3		Perforated; 5,256-5,257; 1/29/2014
5,133.9	5,005.7	14.3		Perforated; 5,270-5,271; 1/29/2014
5,200.1	5,069.9	13.9		Perforated; 5,280-5,282; 1/29/2014
5,217.8	5,087.1	14.2		Perforated; 5,306-5,308; 1/29/2014
5,240.2	5,108.7	14.7		Perforated; 5,316-5,318; 1/29/2014
5,255.9	5,123.9	15.0		Perforated; 5,656-5,658; 1/28/2014
5,270.0	5,137.6	15.2		1-3; Anchor/catcher; 4 1/2; 2.441; 5,662-5,665; 2.80
5,279.9	5,147.1	15.3		Perforated; 5,664-5,668; 1/28/2014
5,306.1	5,172.3	15.8		1-4; Tubing; 2 7/8; 2.441; 5,665-5,697; 32.40
5,315.9	5,181.8	16.0		1-5; Pump Seating Nipple; 2 7/8; 5,697-5,698; 1.10
5,655.8	5,508.3	16.1		1-6; Tubing; 2 7/8; 2.441; 5,698-5,762; 63.75
5,662.1	5,514.3	16.1		1-7; Notched collar; 2 7/8; 2.441; 5,762-5,763; 0.50
5,664.7	5,516.8	16.1		3; Production; 5 1/2 in; 4.950 in; 10-6,179 ftKB; 6,169.27 ft
5,690.0	5,541.1	16.1		
5,698.5	5,549.3	16.1		
5,762.1	5,610.6	15.3		
6,132.2	5,969.4	12.4		
6,178.1	6,014.2	12.3		
6,185.0	6,021.0	12.3		